CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

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Sixty-sixth meeting of the Standing Committee
Geneva (Switzerland), 11-15 January 2016

# HANDBOOK ON CITES AND LIVELIHOODS

This document was prepared jointly by the Secretariat and the General Secretariat of the Organization of American States (OAS) in relation to agenda item 18 on *CITES and livelihoods: Report of the Working group.*

# HANDBOOK ON CITES AND LIVELIHOODS

## Part I

**How to rapidly assess the effects of the application of CITES decisions on livelihoods in poor rural communities.**

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ISBN 978-0-8270-6361-7

# HANDBOOK ON CITES AND LIVELIHOODS

PART I

How to rapidly assess the effects of the application of CITES decisions on livelihoods in poor rural communities

General Secretariat of the Organization of American States (GS/OAS)

Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

WASHINGTON D.C.

JUNE 2015

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**OAS Cataloging-in-Publication Data**

Organization of American States. Department of Sustainable Development.

Guía práctica sobre la CITES y los medios de subsistencia : Parte 1 : Cómo evaluar rápidamente los efectos de la aplicación de las decisiones de inclusión en los apéndices de la CITES en los medios de subsistencia de las comunidades rurales / [Preparado por el Departamento de Desarrollo Sostenible de la Organización de los Estados Americanos en colaboración con la Secretaría de la Convención sobre el Comercio Internacional de las Especies Amenazadas de Fauna y Flora Silvestres (CITES)].

p. : ill. ; cm. (OAS. Documentos oficiales ; OEA/Ser.D/XXIII.25.1)

ISBN 978-0-8270-6361-7

1. Endangered species. 2. Wild animal trade. 3. Wild plant trade. 4. Sustainable development.

I. Title. II. Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973). III. Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres (1973)

IV. Organization of American States. Executive Secretariat for Integral Development. V. Series.

OEA/Ser.D/XXIII.25.1

The information contained on this guide is based on the CITES & Livelihoods document CoP 16 Inf.21

Part 1: Rapid Assessment Tools. Tools to assess the impact of the implementation of CITES listings on the livelihoods of the poor prepared by the CITES Secretariat and the Working Group on CITES and Livelihoods. Edited by Rodrigo Martinez consultant at the Department of Sustainable Development of the General Secretariat of the Organization of American States.

Artwork, layout and design: Fredy A. Fonseca Ochoa



Foreign Affairs, Trade and Development Canada

Affaires étrangères, commerce et Devéloppement Canada

The financial support provided by the Government of Canada to this initiative through the Department of Foreign Affairs, Trade and Development (DFATD) is greatly appreciated.

# How to rapidly assess the effects of the application of CITES decisions on livelihoods in poor rural communities.

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# Acronyms

AWF: African Wildlife Foundation
CBA: Agency for the Promotion of Imports from the Netherlands
CIAT: International Center for Tropical Agriculture
CIFOR: Center for International Forestry Research
CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora
DFID: Department for International Development-UK
DICE: Durrell Institute of Conservation and Ecology
FAO: Food and Agriculture Organization
IFRC: International Federation of Red Cross Society and Red Crescent
ILO: International Labor Organization
ITC: International Trade Center
LOAM: Landscapes Outcome Assessment Methodology
NWTPR: Trade Policy National Wildlife - National Wildlife Trade Policy Review (by its acronym in English).
OECD: Organization for Economic Cooperation and Development
ODI: Overseas Development Institute
OAS: Organization of American States
ILO: International Labour Organization
WHO: World Health Organization
PA-BAT: Protected Area Benefits Assessment Tool
NTFP: Non-Timber Forest Products
UNEP-WCMC: United Nations Environment Program - National Center for Conservation Monitoring (UNEP-WCMC)
UNCTAD: United Nations Conference on Trade and Development
UNEP: United Nations Environment Program
WCS: Wildlife Conservation Society
WWF: World Wildlife Foundation

# Prologue

CITES and the Organization of American States (OAS) share a vision: "to conserve biodiversity and contribute to its sustainable use by ensuring that no species of wild fauna or flora becomes or remains subject to unsustainable exploitation through international trade, contributing to the significant reduction in the rate of biodiversity loss and the achievement of the respective Aichi targets". Since the first Summit of the Americas in 1994, the Member States of the OAS - all Parties to CITES - have committed to this vision to benefit the peoples of the Americas.

The Conference of the Parties to CITES (COP) acknowledged in 2004 that the implementation of CITES listings should take into account its potential impacts on the livelihoods of poor rural communities. At the last meeting of the COP, held in Bangkok in 2013, the Parties took another important step, formally recognizing that the implementation of CITES is better achieved with the engagement of rural communities.

More specifically, the COP adopted two significant resolutions related to the livelihoods of poor rural communities: Resolution Conf. 8.3 (Rev. CoP13) on the recognition of the benefits of trade in wildlife, and Resolution Conf. 16.6 on CITES and livelihoods.

Also noteworthy for the purposes of this guide are CITES decisions 16.17 to 16.25 regarding CITES and livelihoods, adopted at COP16 in Bangkok. These decisions contain the roadmap on how to address issues related to CITES and livelihoods between COP16 and COP17, to be held in late 2016 in South Africa. The decisions essentially provided for the development of a toolkit to assess the impacts of CITES listings on livelihoods; the preparation of guidelines on preventing and mitigating any negative impacts on livelihoods; and conducting relevant case studies, both species-specific and from a thematic perspective.

In this regard, the General Secretariat of the OAS, through its Department of Sustainable Development (OAS/DSD), together with the CITES Secretariat, organized a workshop on "assessing and addressing the impacts of CITES decisions on subsistence livelihoods" in Cispatá, Colombia in February 2015. The purpose of this workshop was to present successful experiences and encourage the exchange of lessons learned on the links between livelihoods and CITES-listed species.

A dialogue was also held in Colombia in February 2015 in order to discuss a draft of this handbook based on the toolkit and guidelines developed by the Working Group on CITES and livelihoods. This handbook was jointly prepared by the OAS/DSD and the CITES Secretariat based on documents developed by the Working Group on CITES and livelihoods, and inputs received at the workshop in Cispatá, Colombia. All Member States and Organizations who attended the meeting were invited to provide inputs for the handbook.

It is in this context that we have the great pleasure to present this handbook on CITES and Livelihoods. The Handbook is meant to serve as a reference guide for the implementation by multiple stakeholders and beneficiaries of a rapid evaluation of the impact of CITES listings on the livelihoods of poor rural communities, while also providing a means to identify mitigation or adaptation strategies that address said impacts.

As stated in the aforementioned Resolution 16.6, the implementation of CITES is better achieved through the engagement of rural communities. By adapting and simplifying the CITES and livelihoods toolkit and guidelines submitted to CoP16 (CoP16 Inf. 21), this Handbook aims to support the effective implementation of the Convention by enabling countries to assess the impacts of the decision making process on the livelihoods of poor rural communities that are living alongside wild animals and plants protected by CITES.

It is our hope that this Handbook benefits a wide range of stakeholders, from the global to the national level, and that it may be used by both CITES management and scientific and administrative authorities, as well as local officials responsible for the implementation of other biodiversity related conventions, regional and international organizations, civil society organizations, local and municipal authorities, and research centers that work on topics related to the links between people and the environment.

While this handbook has a global reach, from the perspective of the OAS it is an essential tool for the Americas, one of the most biodiverse regions on the planet, but also the region with the most inequality and dependence on natural resources.

This handbook is dedicated to all poor rural communities that interact on a daily basis with the flora and fauna protected by CITES, including the communities of Lucanas in Peru and Cispatá, Colombia, who generously hosted and inspired the work of the Working Group on CITES and livelihoods.

**Cletus Springer**
Director, Department of
Sustainable Development
Organization of American States

**John Scanlon**
Secretary-General
CITES Secretariat

# Acknowledgements

This Handbook is the result of a collaborative effort involving many people and institutions, all of which to whom the CITES Secretariat and the General Secretariat of the Organization of American States are deeply grateful.

Special recognition is owed to the government of Peru, as Chair of the CITES Working Group on livelihoods, currently represented by Mirbel Epiquien, Director-General for Sustainable Management of Forest Heritage and Wildlife, SERFOR Peru, and to all of the national authorities that comprise the Working Group, for their valuable support in the development of the technical contents of this handbook, namely:

Pablo Mesa, Roman Javier and Guillermo Lingua Baigún from Argentina; Max Abensperg-Traun from Austria; Alfonso Casilla Tito, Maria del Pilar Becerra and Veronica Vargas from Bolivia; Abednico Leano Machene and Cyril Taolo from Botswana; Davi Bonavides and Ugo Eichler Vercillo from Brazil; Basile Van Havre and Carolina Caceres from Canada; Nancy Cespedes from Chile; Hong Xiao and Wu Zhongze from China; Sebastian Restrepo, Maria Piedad Baptiste, Giovanni Ulloa, Clara Sierra, Jose Antonio Gomez Hoyos, Margarita Osorio, and Clara Sierra from Colombia; Jose Joaquin Calvo from Costa Rica; Cesar Belteton and Adrian Cesar Galvez from Guatemala; Abdul Muin from Indonesia; Patrick Omondi from Kenya; René Castellón from Nicaragua; Thea Carroll and Moscow Marumo from South Africa; Silvia Velasquez, Karina Ramirez, Pilar Tuppia, Karina Santti, Silvia Janneau Jose Augusto and Jara Summer from Peru; Leonard Muamba Kanda from Democratic Republic of Congo; Frank Kohn from the United States of America; and Edson Chidziya and Olivia Mufute from Zimbabwe.

As well as the institutions that are part of the Working Group on CITES and livelihoods:

Robert Skidmore of ITC; David Vivas of the United Nations Conference on Trade and Development (UNCTAD); Alison Rosser and Kelly Malsch of UNEP-WCMC; Rosie Cooney and Dena Cator of the International Union for Conservation of Nature and Natural Resources (IUCN); John Jackson of Conservation Force; Peter Pueschel of IFAW; Eugene Lapointe of IWMC World Conservation Trust; Daniela Freyer of Pro-Wildlife; Eduardo Escobedo of RESP; Matthew Eckert Safari of Club International Foundation; Ann Michels of Species Survival Network; and Steve Broad of TRAFFIC.

In addition, we would like to extend special thanks to the experts and stakeholders from various sectors, including government agencies, civil society organizations, academic institutions and research centers, who have contributed to this effort. In this context, we would like to highlight the generous contributions and work of the following individuals, institutions and communities:

Guido Miranda; Dr. Nathalie van Viliet; Diego Amorocho; the Lacuna community of Peru and Asocaimán community of Colombia; the Wildlife Conservation Society; the World Wildlife Fund; Fatima Vanegas and Alejandra Maria Laina of the Department of Interior of the United States (DOI); Adriana Rivera of GIZ; Gabriel Jaramillo from UNDP and Mauricio Chavarro from UNODC.

The leadership and guidance of Juan Carlos Vasquez of the CITES Secretariat and Claudia de Windt of the OAS' Department for Sustainable Development in the process of compiling and gathering input from the various contributing institutions and stakeholders is much appreciated. In addition, the dedication and effort of Mr. Alejandro Larriera, Vice-president of the CSG / SSC / IUCN Crocodile Specialist Group, and Environmental Economist Rodrigo Martinez in adapting and preparing the technical and scientific content, as well as the creative touches and wise recommendations of Mr. Freddy Ochoa, were instrumental in the development of this handbook.

The financial support provided by the Government of Canada to this initiative through the Department of Foreign Affairs, Trade and Development (DFATD) is greatly appreciated.

In the event that we have involuntarily missed any individuals, we would like to express our gratitude to everyone who has contributed in any way to the publication of this handbook.

# Introduction

The consequences resulting from the inclusion of species in the CITES convention for the livelihoods of the poorest rural communities, both in terms of the number of people affected and the degree of the impact, remain to have been studied in an extensive manner. There is thus a general lack of detailed information on the real positive or negative impacts on the livelihoods of rural communities.

Increasingly, however, it has become clear that regulating the international trade of an unsustainably managed species may impact, whether positively or negatively, the livelihoods of poor rural communities that form part of the chain of production and distribution of the species. The positive and/or negative consequences for each actor depend on several factors, including: the intended use of the species (i.e. for trade or personal consumption); the role of the actor in the value chain; the actor's financial capacity to invest in ex-situ management; and the actor's resilience to fluctuations in the price of the resource, among other variables. The impacts in turn determine the opinion of affected communities on the regulation adopted.

Given the variety of impacts affecting the poorest individuals, it is essential that impacts are measured systematically, not only in order to properly identify winners and losers, but also so that mitigation strategies may be developed accordingly for those that suffer negative impacts.

## What is the purpose of this Handbook?

Members of the CITES Working Group on livelihoods, with the support of the CITES Secretariat and the General Secretariat of the OAS, have prepared this handbook on CITES and Livelihoods as a tool intended for those carrying out rapid rural appraisals of the positive and negative effects resulting from the implementation of the inclusions in the Appendices of CITES on the livelihoods of the poor. The Handbook has been developed in accordance with Resolution Conf. 16.6, which encourages the development of mitigation strategies (in the case of negative impacts) or improvement strategies (in the case of positive impacts), using contextually relevant methodologies.

## What are livelihoods?

Livelihoods are the means that enable people to earn a living. This includes the capabilities, assets, income and activities people require in order to ensure that their basic needs are covered. A livelihood is sustainable when it allows people to cope with, and recover from, setbacks and stress (such as natural disasters and economic or social upheavals), and improve their welfare and that of future generations without degrading the environment or natural resources base (Chambers and Conway, 1991).

The information presented in this Handbook is linked to other relevant processes (both CITES and non-CITES) with the objective of avoiding the duplication of efforts, in particular with the National Wildlife Trade Policy Review (NWTPR).

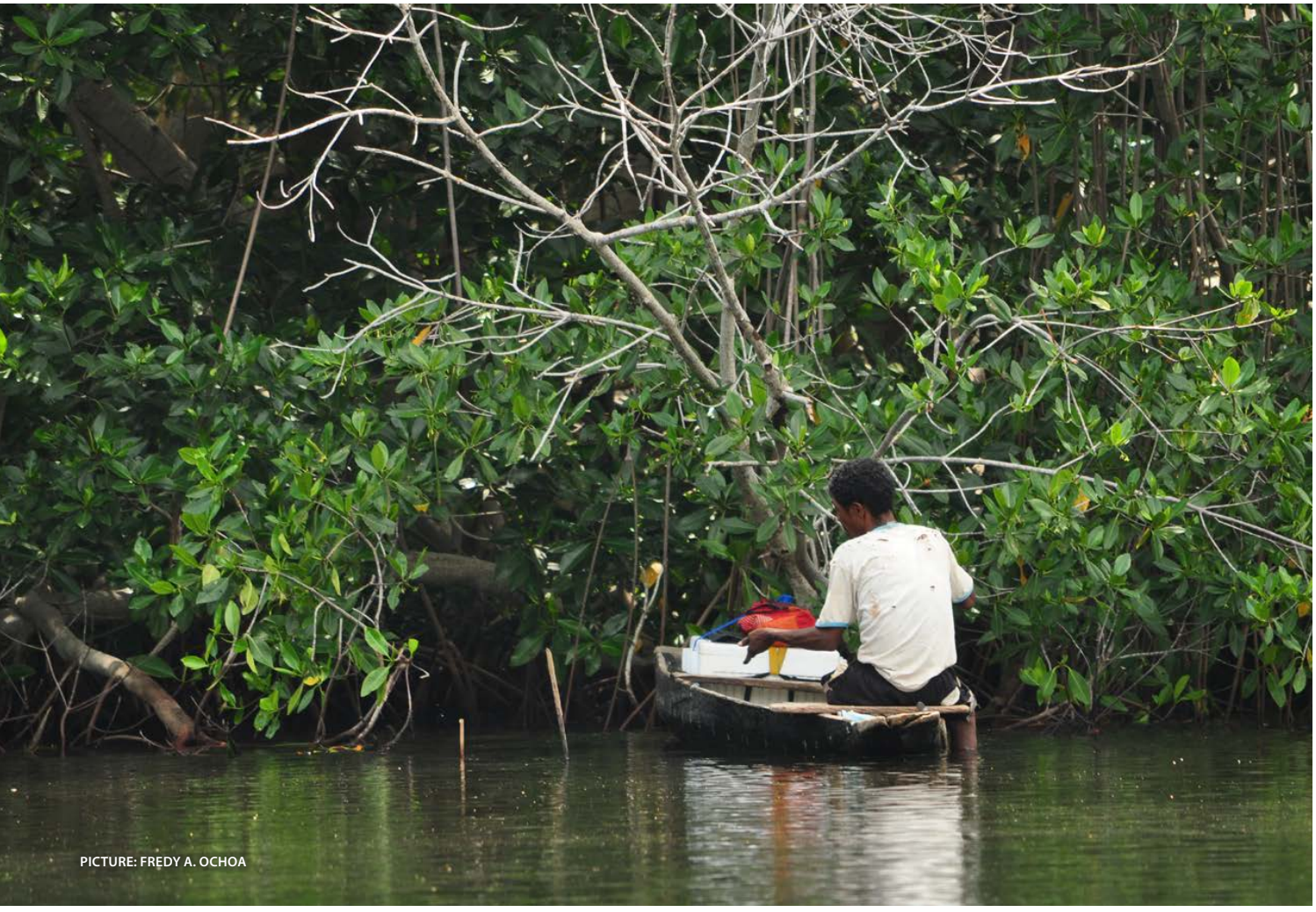
## Who can benefit from this guide?

The Handbook is designed as practical, quick-reference document for scientific and administration authorities responsible for CITES management and biodiversity-related conventions. It may also be of use to research centers studying topics related to the sustainable use of biodiversity and regional and international organizations, civil society, local and municipal authorities, and grassroots communities seeking to advance the understanding and implementation of impact evaluations and mitigation

measures.

## What information can be found in this Handbook?

The Handbook is divided into two parts. The first part describes the six general steps for rapid impact assessments based on participatory rural appraisal methodologies that have been developed by development and cooperation agencies. These steps function as a starting point for assessing the socio-economic effects of implementing CITES listings. The Sustainable Livelihoods Framework, which serves as a reference for understanding the basics of the methodologies presented, is detailed in Annex I of the document, Part II addresses the mitigation of negative impacts on livelihoods, as well as the enhancement of sustainable use initiatives of Appendices II and III species that meet the CITES requirements. In addition, this section outlines potential types of impacts and their corresponding mitigation strategies. Subsequently, eight key factors for ensuring the sustainable use of species are presented. Finally, Part II introduces six steps for addressing and mitigating a variety of impacts. Annex II presents 14 successful and unsuccessful case studies, each accompanied by their respective lessons learned. The studies are grouped into the following topics: ecotourism, hunting, the trade of live animals and plants, medicinal and aromatic products, wood products, and fiber products and textiles.



PICTURE: FREDY A. OCHOA

# Background

## CITES resolutions

Since 2004, the Conference of the Parties to CITES (CoP) has recognized that the implementation of CITES should take into account its potential impact on the livelihoods of the poor. At the sixteenth session of the CoP, held in Bangkok in 2013, the parties recognized that the Convention could be better implemented if it incorporated the participation of poor rural communities, particularly those whose livelihoods traditionally depend on species that are included in the Appendices of CITES.

To date, there are two CoP Resolutions that address this issue: Resolution Conf. 8.3 (Rev. CoP13) recognizes the potential benefits of trade in wildlife, and Resolution Conf. 16.6 highlights the link between CITES listings and livelihoods. At CoP16, the Conference of the Parties also adopted Decisions 16.17 to 16.25 on livelihoods, which may be found at http://www.cites.org/sites/default/files/esp/com/sc/65/ S-SC65-19.pdf.

Of particular relevance to this guide are Decisions 16.17 to 16.19, targeted to the Parties:

16.17

Exporting and importing countries are invited to carry out voluntary rapid assessments of the impact of implementation of CITES-listing decisions on the livelihoods of rural communities and to mitigate negative impacts.

Parties are encouraged to develop case studies and facilitate exchange visits between relevant stakeholders from the different ongoing conservation and sustainable use programmes which address issues related to CITES and livelihoods in order to stimulate the exchange of lessons learned regarding CITES-listed species living in similar environments and/or social conditions.

16.19

Parties, intergovernmental and non-governmental organizations and public and private donors and investors are encouraged to support rapid assessments of the impact of the implementation of CITES-listing decisions on the livelihoods of rural communities, the implementation of activities which mitigate any negative impacts, and cooperation agreements between relevant national government agencies and rural communities.

*To date, the Working Group of CITES and livelihoods* has prepared a document - CITES CoP16 Inf 21 – in which tools for the assessment of impacts of CITES listings on livelihoods are identified. Furthermore, the Working Group has undertaken initiatives and workshops aimed at improving these tools in order to prepare both case studies and guidelines on the prevention and mitigation of negative impacts.

# Criteria for choosing Participatory Rural Appraisals

This Handbook does not attempt to present an exhaustive account of the methodologies available, but instead seeks to highlight those that are particularly relevant to assessing the impacts on livelihoods of CITES listings. The selection of the most appropriate methodology will depend on a number of characteristics and singularities pertaining to each situation, location and context of the assessment in question. Generally, when confronted with several options Parties should consider the following in selecting the most appropriate methodology:

- **Scale and scope of the evaluation**: Parties must decide the scale of assessment. The larger the scale of the assessment (e.g. the higher the number of taxa and the greater the geographical areas to be covered), the less detailed the evaluation will be. This will influence the type of methodology selected.
- **Availability of time, resources and technical capacity:** The human and financial resources available at the beginning of the assessment will define the depth of the study, as will the time spent conducting social surveys and field research. The larger the expected impacts of an intervention, the greater the need for information and resources will be. In addition, the reliability of a participatory rural appraisal will depend partly on the time spent conducting surveys. The accuracy of the information collected will be greater the more time the interviewer spends conducting each survey, as well as the more questions the interviewer asks. The methodologies themselves do not decide the cost of the evaluation; rather the depth and time spent implementing the evaluation will determine its cost. With this in mind, some Parties may choose to use all or just part of a given methodology.
- **Availability and relevance of data:** Before considering the selection of a methodology, the availability of data from secondary sources should be reviewed, starting with a desk-based analysis. If there is no information available or the information at hand is not reliable, it is advisable that Parties search local and international organizations that have developed relevant baselines. Furthermore, Participatory Rural Appraisals are usually carried out by multidisciplinary teams. In this regard, it can be helpful to approach other organizations involved in poverty reduction and conservation projects, which may encourage multidisciplinary teamwork with the added benefit of sharing evaluation experience amongst team members.
- **Degree of participation**: The methodologies included in each step may be carried out with varying degrees of participation. A Rapid Rural Appraisal with a high level of participation will seek to empower the communities and usually implies a more open and time-consuming design, compared to an appraisal with a low level of participation (Bergeron, 1999). It should be noted that poor rural communities often describe their livelihoods and the impacts of CITES listings in a vastly different manner than researchers. With this in mind, it is recommended that evaluations be as participatory as possible.
- **Degree of vulnerability and risk / perceived benefit on livelihoods:** Data collection should be proportional to risk. If it is estimated that livelihoods face a high level of risk, it is important to identify a methodology that allows for the collection of ample information, including an analysis of the five 'capitals' belonging to the Sustainable Livelihoods Framework: physical, human, natural, financial, and social.
- **Size of the potentially affected population:** Detailed studies involving extensive surveys are not recommended when larger populations are being assessed.

# Steps of a Participatory Rural Appraisal of the impacts of the application of CITES decisions on livelihoods in poor rural communities.

When interested parties decide to carry out a rapid assessment, they may consider the steps outlined below:

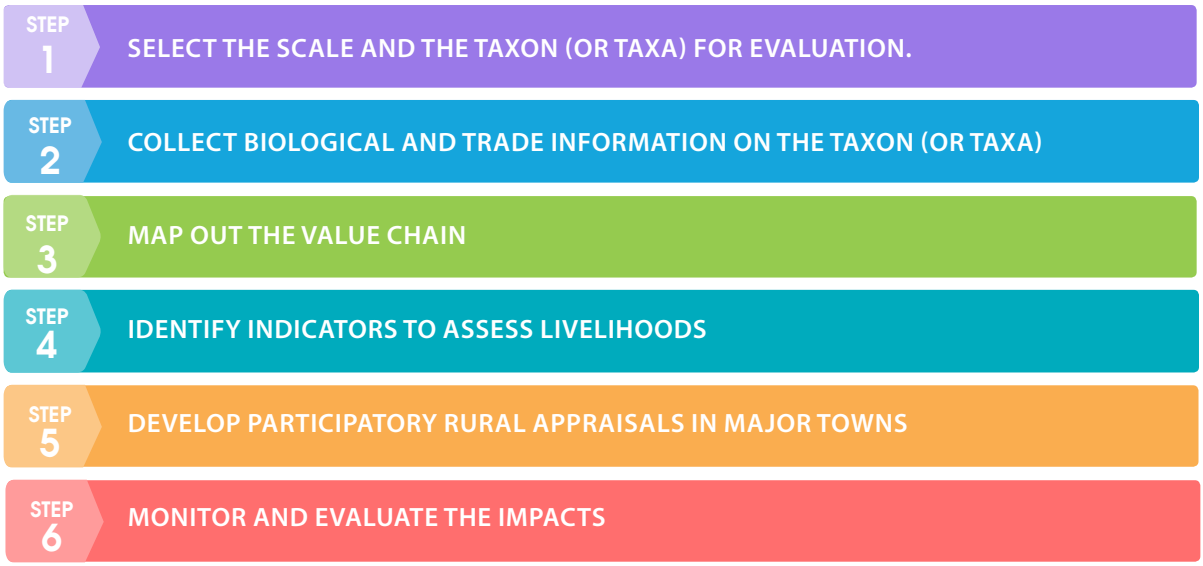
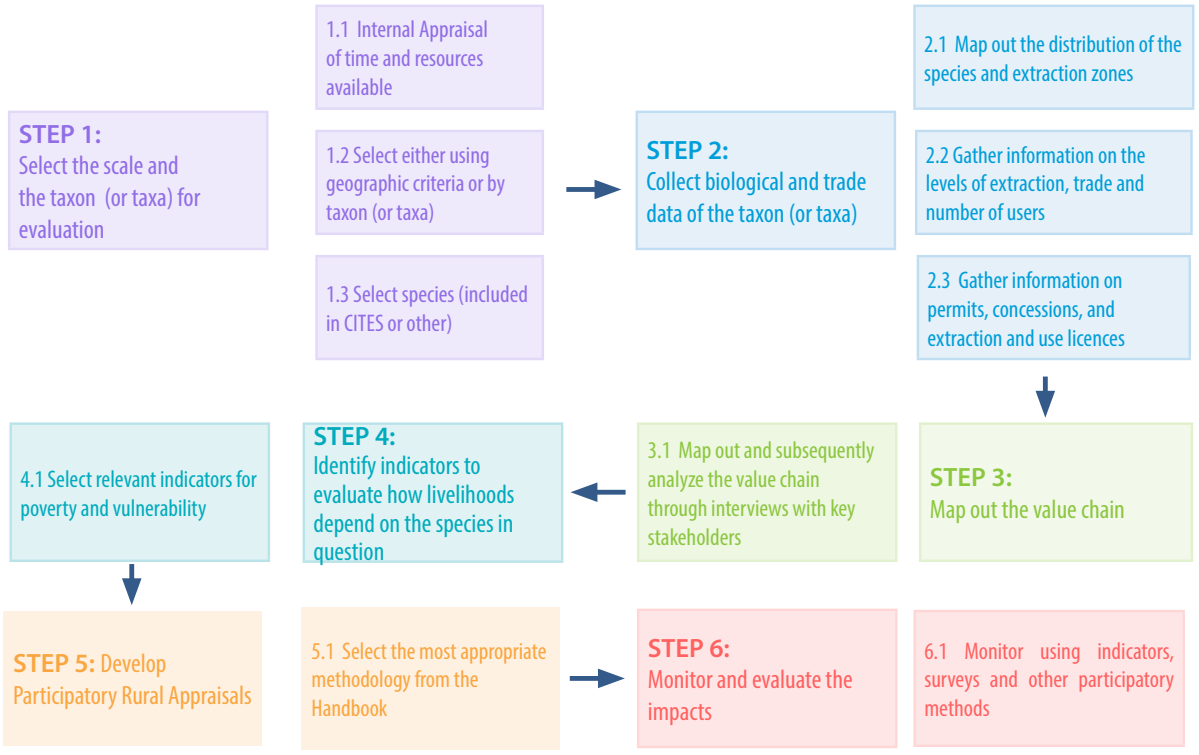



**FIGURE 1** STEPS OF A PARTICIPATORY RURAL APPRAISAL OF THE IMPACT OF CITES ON LIVELIHOODS




# STEP 1.SELECT THE SCALE AND THE TAXON (OR TAXA) FOR EVALUATION


1.1 First, carry out an internal review of the time, resources and personnel capacity available to conduct a social impact assessment, as this will define how the next points are to be addressed.

1.2 Decide if the selection will be made with a view to geographical criteria or taxon (or taxa):

1.2.1 If you seek to carry out a large scale assessment using geographical criteria, you may choose to draw a national or jurisdictional map of the areas of extraction intended for export, and within this area select the taxon (or taxa). National or regional level authorities would make this decision.

1.2.2 Alternatively, you may wish to determine the assessment based on the taxon (or taxa) in question, and from there decide whether to perform a generic assessment or one based on a particular taxon. A generic assessment would study the potential impacts of all decisions of listed species for all taxa in the country at hand. This would lead to the development of a national mitigation strategy, or the inclusion of the findings of the assessment in the framework of the country's National Wildlife Trade Policy, or other policies affecting the livelihoods of poor rural communities.

1.3 Decide whether or not to select CITES-listed species.

1.3.1 For CITES-listed species, you may wish to select those known to have an impact in the value chain, or that have the potential to do so, particularly for the poorest rural communities.

1.3.2 For species not included in CITES, the value of undertaking an evaluation lies in that it may contribute to the development of a proposal for inclusion of a species in CITES. This would provide valuable information on the impact on existing management systems, and would serve as a comparison for subsequent evaluations should the species be listed in CITES.

1.3.3 Review or consider the processes of national and international management of species currently in place, particularly with regards to potentially stricter domestic measures, and the results of the National Wildlife Trade Policy Review (NWTPR), if one has been carried out.

1.4 When choosing a CITES-listed species, the following characteristics should be prioritized (in this order):

1.4.1 Included in Appendix I, and:

- Associated with no mitigation strategies after experiencing a period of intense trade, or;
- Linked to mitigation strategies such as ex situ artificial propagation or captive breeding and trophy hunting quotas. In this case the objective would be to evaluate the effectiveness of such strategies.

1.4.2 Included in Appendix II, and:

- Subject to the recommendations of a CITES Significant Trade Review. Information available at: http://sigtrade.cites.org/

- Subject to regular or high levels of documented trade. Information available at: http://www.unep-wcmc.org/citestrade/trade.cfm
- With scarce evidence of having been traded in the past.

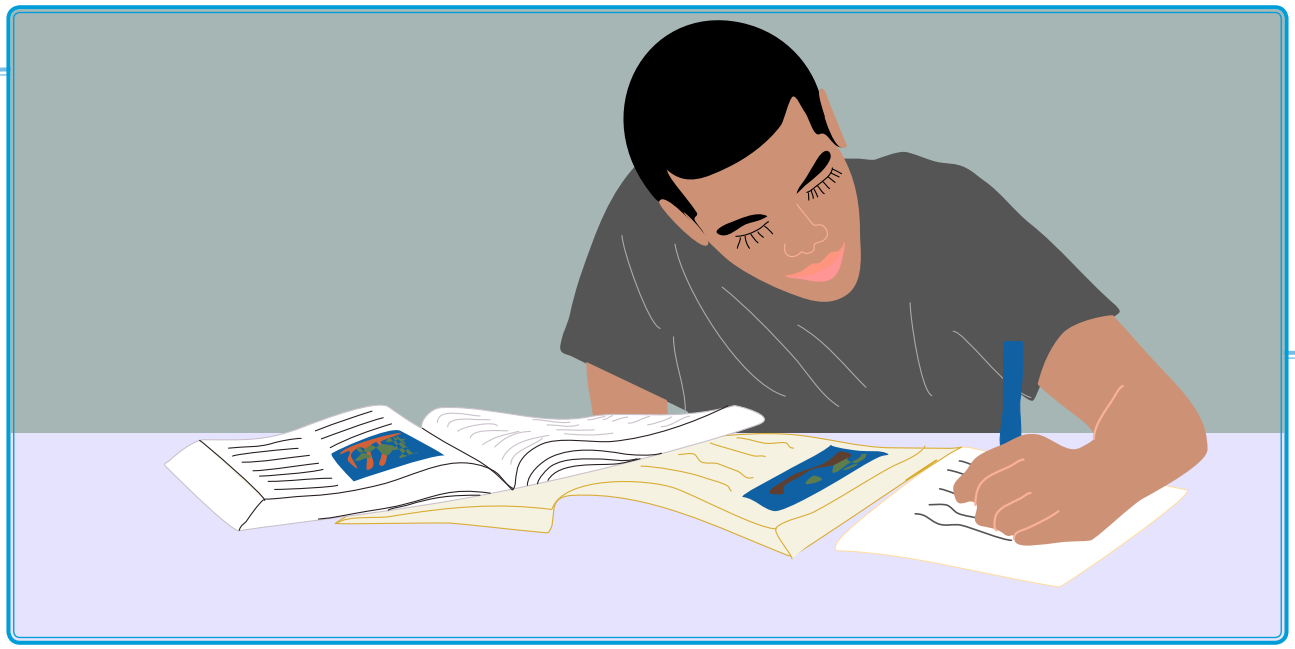
1.4.3 Included in Appendix III.

1.5 Parties may also wish to consider selecting species listed in Appendices I, II and III if:

- Its inclusion in CITES has changed over the last ten years;
- Its wild harvest is the most important resource for the livelihoods of poor rural communities;
- It is estimated that trade of the species now generates less income for the community, either due to a reduction in volume or price.

***Notes***

# STEP 2. COLLECT BIOLOGICAL AND TRADE DATA ON THE TAXON (OR TAXA)



22.1 Map out the distribution of species and extraction areas.

2.2 Gather information on the levels of extraction, trade of target species, and number of people involved (as part of a non detriment findings review (NDF);

- A collection of secondary information on the selected species may be found in chambers of commerce and organizations supporting small and medium enterprises, research centers, universities, administrative and environmental authorities, and international entities such as ITC (International Trade Center), CBA (Agency for Promotion of Imports from the Netherlands), UNCTAD Stat, or FAO.
- If secondary information is not available, it may be obtained by carrying out surveys and market studies on the species. For example, by collecting preliminary information on the value harvesters and processors assign to their use of the species.

2.3 Gather information on permits, licensing, and enforcement methods in relation to illicit trade. This will contribute to a better understanding of the potential impact on certain groups that make up the value chain.

Methodologies that can be used to collect trade information include:

- Cruciano, A. 2007. The Livelihood Assessment Toolkit: a comprehensive rapid assessment of the impact of disasters on livelihoods. FAO - ILO. http://www.fao.org/fileadmin/user_upload/emergencies/docs/LAT_Brochure_LoRes.pdf
- Lundy & Gottret. 2004. Design of Strategies to Increase the Competitiveness of smallholder chains: Field Manual. CIAT. http://ciat-library.ciat.cgiar.org:8080/jspui/handle/123456789/1098

## Notes

# STEP 3. MAP OUT THE VALUE CHAIN

3.1 Draw a map and carry out a subsequent analysis of the value chain from the harvester/ hunter to the merchant, in order to identify the most vulnerable stakeholders involved at each juncture, focusing first on poor rural communities and those at the beginning of the value chain. This can be achieved through stakeholder interviews and focus groups.

Value chains are not necessarily linear, and consist of different activities that determine the various links and actors involved, including:

- Collection/harvesting of the wild resource;
- Wild resource management;
- Cultivation of the resource;
- Processing - either cleaning or drying that requires special expertise (e.g. natural fiber weaving), the purchase of inputs (e.g. dyes) or technologies;
- Storage - including the accumulation of raw materials and/or finished product at different points in the value chain;
- Transport - from the collection site and at other points along the value chain;
- Commercialization - the identification and development of market segments and niches;
- Sale - often between various groups of actors in the value chain.

When mapping out the value chain, the following literature may be consulted:

a. Chapter 9: Marshall et al. 2006. Commercialization of Non Timber Forest Products: Factors Influencing Success. Lessons Learned from Mexico and Bolivia and Policy Implications for Decision-makers. UNEP World Conservation Monitoring Centre, Cambridge, UK. http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/3769.pdf

b. The steps to map the value chain portrayed in chapter 7 of: Lundy, & Gottret. 2004. Design of Strategies to Increase the Competitiveness of smallholder chains: Field Manual. CIAT. http://ciat-library.ciat.cgiar.org:8080/jspui/handle/123456789/1098. The Spanish version may downloaded at: http://ciat-library.ciat.cgiar.org:8080/jspui/handle/123456789/1093

c. Appendix C: Supplementary market guidance, guide 6 - Mapping Markets and Commodity Flow in: Boudrea, T. 2007. (Ed). The Practitioners' Guide to the Household Economy Approach. The Household Economy Approach: A Programme guide for planners and policy-makers and The Household Economy Approach Facilitator's Resource Pack: Guidance materials for trainers http://www.savethechildren.org.uk/resources/online-library/practitioners%E2%80%99-guide-household-economy-approach

## Notes

# STEP 4. IDENTIFY INDICATORS TO EVALUATE HOW LIVELIHOODS DEPEND ON THE SPECIES IN QUESTION

4.1 Having identified the most vulnerable groups, people or communities, relevant poverty indicators must then be selected. These indicators will measure the impacts and changes. Gender equality indicators should also be included here.

4.2 The following resources may be consulted prior to the identification of indicators:

a. Wilkie, D., Wieland, M. and Detoeuf, D. 2015. A guide to the modified Basic Necessities Survey: Why and how to conduct BNS in conservation landscapes. WCS, New York, USA. http://globalinitiatives.wcs.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=28192&PortalId=97&DownloadMethod=attachment.

b. Leishner et al. 2007. Nature's investment bank. How marine protected areas contribute to poverty reduction. The Nature Conservancy, Washington, USA. http://www.nature.org/media/science/mpa_report.pdf.

c. Kusters et al. 2005. A method to assess the outcomes of forest product trade on livelihoods and the environment. CIFOR Working Paper no. 32. www.cifor.cgiar.org/publications/pdf_files/WPapers/WP32Kusters.pdf

d. Aldrich & Sayer, 2007 Landscape Outcomes Assessment Methodology (LOAM) In Practice. WWF, Gland, Switzerland. http://ciifad.cornell.edu/downloads/ME_LOAM_In_PracticeMay07.pdf. Annexes 2 and 3.

## Notes

# STEP 5. DEVELOP PARTICIPATORY RURAL APPRAISALS IN MAJOR TOWNS

5.1 Select the most appropriate methodology according to the time and human and financial resources available.

Most participatory rural appraisal methodologies recommend following the steps:

- Define the problem to be evaluated;
- Compile secondary information ;
- Identify areas or main communities in which information about livelihoods can be collected using a map or list of key sites;
- Conduct a stakeholder and institutional analysis to identify those that are key in the management of resources;
- In order to identify how livelihoods are affected, individuals must be interviewed, first to ascertain their livelihood strategies, and, second, to examine how these strategies might vary by gender or income level. This process may take the form of stakeholder interviews, focus groups or household surveys. Under the CITES framework, one key method for identifying stakeholders is the study of the production chain.

5.2 It is advisable to review the following methodologies, which may be adapted for use in a variety of contexts:

a. Sheil & Rajindar et.al. 2002. Exploring biological diversity, environment and the local people's perspectives in forest landscapes: Methods for a multidisciplinary landscape assessment http://www.cifor.org/mla/download/publication/exploring_bio.pdf

b. Kusters et al. 2005. "CIFOR: Method to evaluate the results of trade in forest products for livelihoods and the environment (http://www.cifor.org/ntfpcd/pdf/OWP7. pdf). This method contains many useful elements included in the CITES framework. In particular, the questions in Annex III used for the evaluation of sustainable livelihoods can be easily adapted to CITES, and Annex IV for the environmental assessment of the use of species. For example:

- Has physical access to the resource by producers become a lot worse (-2) worse (-1) better (+1) or much better (+2) as a result of the implementation of the CITES listing?
- Has there been a large reduction (-2), reduction (-1), increase (+1), or large increase (+2) in cash income for farming families as a result of the implementation of inclusion in CITES, or there has been no impact (0)?
- Has the health and nutritional condition of the community become much worse (-2), worse (-1), better (+1), or much better (+2) due to the implementation of the CITES listing, or was thereno impact (0)?

c. Marshall et al. 2006. Commercialization of Non Timber Forest Products: Factors Influencing Success. Lessons Learned from Mexico and Bolivia and Policy Implications for Decision-makers. UNEP World Conservation Monitoring Centre, Cambridge, UK. http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/3769.pdf

d. Cruciano, A. 2007. The FAO - ILO Livelihood Assessment Toolkit: a comprehensive rapid assessment of the impact of disasters on livelihoods, atthe following link: http://www.fao.org/fileadmin/user_upload /emergencies/docs/LAT_Brochure_LoRes.pdf. Volume 4 of Cruciano's 2007 publication demonstrates in detail how to perform an assessment of livelihoods, and explains how to deepen the analysis of evaluations.

e. Wilder & Walpole. 2008. Measuring Social Impacts in conservation: experience of using the Most Significant Change Method. Oryx, Volume 42, 529-538. http://www.mande.co.uk/blog/wp-content/uploads/2010/08/2008-Measuring-social-impacts-in-conservation-Wilder-Walpole.pdf

f. IFRC 2007 VCA toolbox with reference sheets. International Federation of Red Cross and Red Crescent Societies. Geneva, Switzerland. http://www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

g. Ashley & Hussein. 2000. Developing Methodologies for Livelihood Impact Assessment: Experience of the African Wildlife Foundation in East Africa. ODI / AWF. http://www.odi.org.uk/resources/download/2032.pdf

h. Dudley & Stolton. 2008 (revised 2009). The Protected Area Benefits Assessment Tool: A methodology. WWF, Gland, Switzerland. Download: http://wwf.panda.org/?174401/PABAT

i. Boudrea, T. 2007. (Ed). The Practitioners' Guide to the Household Economy Approach (HEA). The Household Economy Approach: A guide for programme planners and policy-makers and The Household Economy Approach Facilitator's Resource Pack: Guidance materials for trainers. http://www.savethechildren.org.uk/resources/online-library/practitioners%E2%80%99-guide-household-economy-approach

## Notes

# STEP 6. MONITOR AND EVALUATE THE IMPACTS

6.1 This step focuses on monitoring and evaluating the impacts. Monitoring will take place based on the chosen indicators and will involve stakeholders through surveys, meetings and other participatory methods where appropriate. If there is a possibility that a species could potentially be listed under CITES in the future, it would be useful to develop a baseline survey that would compare the social and environmental indicators both before and after the entry into force of the regulation.

It is recommended that the following specific actions be undertaken when monitoring and evaluating impacts:

- Define the instances and those responsible for the monitoring and evaluation.
- Define how often the selected poverty indicators are to be monitored and the resources needed to do so. The frequency of monitoring will depend on several factors including resource availability, in addition to the dynamics of use and extraction of the species as well as reproduction rates. For example, the frequency will differ if the use of the resource is seasonal or year round.
- Define how the indicators will lead to a decision. In other words, a plan must be established together with stakeholders to take action once the poverty indicator is measured. This plan would lead to the establishment of mitigation measures and the promotion of the sustainable use of the species. Mitigation measures are covered in Part II of this Handbook.
- Set a date for the review of assessments and indicators, in order to make adjustments and modifications if necessary.

6.2 It is recommended that Parties review the following documents for further details on the monitoring and evaluation of impacts:

a. The Most Significant Stories of Change method, when applied to certain stakeholders, can be a means to identify the changes that occur as a result of the inclusion of a species in CITES: Wilder & Walpole. 2008. Measuring Social Impacts conservation: experience of using the Most Significant Change method. Oryx, Volume 42, 529-538, at the following link: http://www.mande.co.uk/blog/wp-content/uploads/2010/08/2008-Measuring-social-impacts-in-conservation-Wilder-Walpole.pdf

b. The step by step Most Significant Stories of Change method can be accessed in: Davies & Dart 2005. The 'Most Significant Change' (MSC) Technique: A Guide to Its Use. http://www.mande.co.uk/docs/MSCGuide.pdf

c. The Cambridge Conservation Forum prepared a useful, questionnaire-based spreadsheet for evaluating and measuring results and impacts. It serves as a point of departure for outcome evaluations at the policy, livelihood and ecological levels. Harmonizing Conservation Measures of Success (2012) http://www.cambridgeconservationforum.org.uk/initiative/harmonising-measures-conservation-success

## *Notes*

# Synthesis of recommended Participatory Rural Appraisal methodologies for measuring the social impacts of CITES

An abundance of methodologies for analyzing the impacts of conservation and development projects on the livelihoods of individuals and communities have been developed. This section summarizes 14 relevant methodologies that may be applied either partially or wholly, depending on the circumstances of each country, region and species. While many of these tools focus on local impacts or are project based, others include complex methods whose application requires a considerable amount of time. Evaluators may extract appropriate methods or questionnaires as needed, taking into consideration their specific resources and context.

**TABLE 1.** MAIN CHARACTERISTICS OF METHODOLOGIES TO EVALUATE SUSTAINABLE LIVELIHOODS

| Organization | Objetive | Conceptual Framework | Method | Results | Time of executions | Author |
|---|---|---|---|---|---|---|
| 1. Method to evaluate the results of trade in forest products for livelihoods and the environment | Results of the commercialization of forest products | Five capitals: list of assets and income with the Likert scale | Homes, community and national level | Report | Variable | CIFOR: Kusters, et.al., 2005 |
| 2. Criterion of the household economy | Vulnerability / drought, price, etc. | Framework of household economy and livelihoods, with market analysis. Baseline + risk + defense mechanism= result | Desk, Household participatory | Quantitative results and maps, Spreadsheet | Update of baseline 3 to 10 years | Save the Children: Boudrea, T. 2007 |
| 3. Outcomes Assessment Methodology for Landscape level -LOAM- | The landscape for project formulations | Risks, taboos, vegetation types, prices, natural products | Desk, Participatory | Spreadsheet, Report | Variable | WWF. Aldrich, & Saber. 2007 |
| 4. Multidisciplinary landscape assessment | The landscape for project formulation | Risks, taboos, vegetation types, prices, natural products | Desk, Participatory | Spreadsheet, Report | Variable | CIFOR: Sheil & Rajindar 2002 |
| 5. Report on the marketing of non-timber forest products | Research on the marketing of non-timber forest products | Five capitals + trade analysis: business budgets, market and value chain analysis | Desk, Participatory, Market Tool | Spreadsheet, Report | Variable 2 weeks initially | UNEP-WCMC:Marshal, et al., 2006 |

| Organization | Objetive | Conceptual Framework | Method | Results | Time of executions | Author |
|---|---|---|---|---|---|---|
| 6. Methodologies for Assessing Livelihoods | Disaster and risk assessment | Framework of sustainable livelihoods, capabilities, assets, activities | ? | ? | ? baseline | FAO/OIT: Cruciano, A. 2007 |
| 7. The Most Significant Change Method | Project impacts | Open | Desk, Participatory | Report | Variable | Fauna y Flora Internacional: Wilder, & Walpole. 2008 |
| 8. Vulnerability and capacity assessment | Vulnerability and risk assessment | Analysis of vulnerability, capacity and risks | Desk, Participatory Homes | Report | Línea de base | Cruz Roja Internacional: IFRC 2007 |
| 9. Nature's Investment Bank | Benefits of protected areas | Opportunities, empowerment, security | Desk, Participatory Homes | Report | Variable | The Nature Conservancy :Leishneret al., 2007 |
| 10. Development of methodologies for the Evaluation of Impacts on Livelihoods: | Impacts and contribution of the projects | Five capitals | Desk, Participatory Homes | Report and method | Variable | ODI/AWF: Ashley, & Hussein. 2000 |
| 11.Tool for the Evaluation of Protected Areas Benefits PA-BAT | Benefits of protected areas | Five capitals – subsistence, economy, culture, ecosystem services, policy | Desk, Participatory | Spreadsheet, Report | Variable | WWF: Dudley, & Stolton. 2008 |
| 12. Cambridge Conservation Measures Partnership | Impact of projects | Five capitals | Desk, Participatory | Spreadsheet, Report | Variable | Cambridge Conservation Forum. 2012 |
| 13. Designing strategies to enhance the competitiveness of value chains with smallholders | Strengthening value chains and production initiatives | Analysis of the value chain | Desk, Participatory | Report and flow process | Variable according to the size and number of links | CIAT: Lundy & Gottret. 2004 |
| 14. Assessing the impact of conservation and development in rural livelihoods: Using a modified Basic Needs Survey for rural communities | Evaluation of livelihoods and poverty indicators | Unmet Basic Needs | Desk, Participatory | Report | Variable, depending on the size of the population to be interviewed | WCS, 2012 |

## 1 Method to Assess the Outcomes of Forest Product Trade on Livelihoods and the Environment: CIFOR

This methodology is a good example of a Rapid Rural Appraisal. It is used to evaluate the impacts of trade in non-timber forest products (NTFP) on livelihoods and the environment. The Sustainable Livelihoods Framework, covered in Annex I of this Handbook, can be used in conjunction with this methodology, which, contains a number of indicators that assess changes in the financial, physical, natural, human and social capitals, at the household and community level. The methodology includes a series of questions organized in a table that demonstrate the results of the evaluation.

The indicators used span four different levels: 1) species population, 2) ecosystem where species use takes place, 3) landscape 4) global. The questions that are presented in the study can be directly applied to the context of CITES. Question 1.1. for instance, asks:

Has commercial production of the NTFP target species led to much worse, worse, better, or much better physical access by producer households to the target resource?

- This methodology is found in Kusters, K. Belcher, B, Ruiz-Perez, M and Achdiawan, R. 2005. A method to assess the outcomes of forest product trade on livelihoods and the environment. CIFOR Working Paper no. 32. www.cifor.cgiar.org/publications/pdf_files/WPapers/WP32Kusters.pdf

## 2 Criterion of the Household Economy Approach: Save the Children

Save the Children presents a framework for analyzing how people obtain food and other goods and services, and how they might respond to changes in their external environment, such as a drought or a rise in food prices. This guide introduces material on how to use market assessments to help determine an appropriate response to acute food insecurity. It is complemented by "The Household Economy Approach: A guide for program planners and policy-makers" and "The Household Economy Approach Facilitator's Resource Pack: Guidance materials for trainers." The guide is very detailed and, as with some of the other tools, the results are displayed in checklists and spreadsheets that enable quantitative analysis. Save the Children uses rapid appraisal methods such as focus groups as the primary means to collect data, but random sampling and surveying may supplement this. Its analysis is based on the idea that geography, production systems, markets and trade determine both vulnerabilities and coping strategies. By assessing the baseline, hazards, and coping strategies, it is possible to predict the potential outcomes. This framework is especially beneficial in the context of CITES, as livelihood zoning maps have been developed by Save the Children and its partners in a number of countries. In Table 2 below, some of the methods discussed in the guide are presented.

**TABLE 2.** DIFFERENT PHASES OF THE METHODS FOR COLLECTING INFORMATION

| ***Baseline*** | |
|---|---|
| Livelihood | Semi-structured interviews per area; participatory workshops; secondary data review |
| Wealth Breakdowns | Semi structured interviews; proportional piling; census data review (to cross check household composition) |
| Analysis of Livelihood Strategies | Semi-structured interviews; secondary data review (to cross-check yields, production, livestock numbers, etc.); proportional piling; participatory seasonal calendars and community mapping |
| ***Outcome Analysis*** | |
| Problem Specification | Household surveys (to gather monitoring data such as crop production and prices); Semi-structured interviews; review of secondary information, especially time series data |
| Analysis of Coping Capacity | Semi-structured interviews; review of secondary data (on labor markets, herd composition, viable off-take rates, etc.) |
| Projected Outcomes | No additional information goes into this step; this step comprises an analysis and processing of the data and information gathered in the previous steps |



- The Save the Children framework is available in: Boudrea, T. 2007. (Ed). The Practitioners' Guide to the Household Economy Approach (HEA). The Household Economy Approach: A guide for programme planners and policy-makers and The Household Economy Approach Facilitator's Resource Pack: Guidance materials for trainers: http://www.savethechildren.org.uk/resources/online-library/practitioners%E2%80%99-guide-household-economy-approach

## 3 Landscape Outcomes Assessment Methodology (LOAM): WWF

The WWF, together with its partners, has developed another tool for use at the landscape level: the Landscape Outcome Assessment Methodology (LOAM) (Aldrich and Sayer, 2007). This tool aims to measure how a landscape changes over time by assessing the progress in delivering agreed upon, predefined conservation and livelihood outcomes. The LOAM also encourages the development of a participatory process and a common understanding amongst stakeholders.

The LOAM applies the Capital Assets/Sustainable Rural Livelihoods Framework (Carney et al., 1998). A stakeholder process is used to develop a small, illustrative set of locally appropriate indicators grouped under each of the five capitals of the Livelihoods Framework. A scoring system is then applied to measure, monitor and demonstrate the changes in the landscape over time. The results can be illustrated graphically. This process begins with initial desk-based studies and is followed by stakeholder analyses and the development of a participatory process, which examines possible scenarios for change and leads to the development of indicators.

- A detailed account of the LOAM methodology may be found in Annexes 2 and 3 of Aldrich, M. and Sayer, J. 2007. Landscape Outcomes Assessment Methodology (LOAM) In Practice. WWF, Gland, Switzerland. http://ciifad.cornell.edu/downloads/ME_LOAM_In_PracticeMay07.pdf

## 4 Multidisciplinary Landscape Assessment: CIFOR

CIFOR has also developed a comprehensive Landscape Level assessment approach. Their approach combines both traditional, scientific recording and participatory recording of site characteristics including soil types and transects, through village surveys. The document uses an explanatory case study from East Kalimantan, Indonesia, to demonstrate the steps taken to advance participatory biodiversity surveys, including: the definition and mapping of the area; interview design; holding focus groups; and conducting surveys. In addition, the method outlines scoring criteria for interviews, and contains forms intended for the collection of biological, social and economic data within the household, the community and the value chain. Many of these data sheets provide useful examples of questions that CITES Parties may adapt according to their needs.

- This methodology can be found in: Sheil D, Rajindar K. et.al. 2002. Exploring biological diversity, environment and the local people's perspectives in forest landscapes: Methods for a multidisciplinary landscape assessment. http://www.cifor.org/mla/download/publication/exploring_bio.pdf

## 5 Commercialization of NTFP Report: UNEP-WCMC

This report summarizes the results of a multidisciplinary project, implemented in Bolivia and Mexico, which analyzed the structure and function of ten non-timber forest product (NTFP) value chains in eighteen communities. It contains a valuable collection of lessons learned on the commercialization of NTFP and livelihoods. Chapter 9 of the report is particularly relevant, as it focuses on mapping and understanding the existing dynamics of a value chain.

- This UNEP Report may be consulted in: Marshall, E., Schreckenberg, K. and Newton, A.C. (Eds) 2006. Commercialization of Non Timber Forest Products: Factors Influencing Success. Lessons Learned from Mexico and Bolivia and Policy Implications for Decision-makers. UNEP World Conservation Monitoring Centre, Cambridge, UK. http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/3769.pdf

## 6 Methodologies for Assessing Livelihoods: FAO / ILO

While this instrument is intended for planning and recovery in the case of a disaster, the tools for developing the baseline and the Participatory Rural Appraisal can be easily adapted for the purposes of CITES evaluations. This instrument recognizes the importance of livelihoods strategies that are not agricultural in nature. The authors prepared a common framework, the Integrated Post-Disaster Livelihood Assessment and Planning System (LAPS), which consists of three phases.

1 Livelihoods Baseline:

   I. Use the manual for livelihood evaluation to design baseline surveys

2 Initial Impact Analysis - Assess initial livelihood impacts:

   I. Assess impacts within 10 days of the disaster

   II. Follow-up with another assessment three months after the disaster

**3 Livelihoods Rapid Assessment:**

**Desk-work:**

   I. Pre-disaster livelihood baseline

   II. Updating labor market information

   III. Severity of disaster exposure

   IV. Organizations' capacity for relief and recovery

**Quick field visits:**

   I. Impact of disaster on local livelihoods

   II. Initial coping strategies

   III. Suggested livelihood recovery responses

   IV. Employment-intensive investment opportunities for recovery

Volume 4 of the document provides a step-by-step explanation of how to conduct a detailed assessment of livelihoods.

- This instrument may be found in: Cruciano, A. 2007. The FAO - ILO Livelihood Assessment Toolkit: a comprehensive rapid assessment of the impact of disasters on livelihoods. http://www.fao.org/fileadmin/user_upload/emergencies/docs/LAT_Brochure_LoRes.pdf

## 7 Most Significant Change Method: Fauna Flora International

The most significant change method is a simple, qualitative and participatory approach that seeks to determine the impact of a program by collecting stories of people affected by the most significant changes experienced during the implementation of a program. The method seeks to ascertain changes in the general standard of living, and people's participation in development and social capital, among other things. The stories are collected during interviews either carried out on an individual basis or in a group setting. As such, this method is a systematic way to collect anecdotal information about changes that cannot be obtained through traditional quantitative methods, and does not use predefined evaluation indicators.

Fauna & Flora International (FFI) has tested the most significant change method for use in a conservation context (Wilder and Walpole, 2008). It can be used as a complement to an impact assessment, and as a means of gathering information about how livelihoods have changed as a result of decisions on the inclusion of species in CITES. Authors note that it is most appropriate for projects that are complex, have diverse outcomes, include many sites, and/or are participatory and focused on social change. In other words, it is a participatory monitoring and evaluation method that requires advance planning and design as well as investments, participation, and regular contact between communities and field teams in order to generate the types of data/accounts needed. (M. Walpole, personal communication.). It is important to note that the analysis indicates that the most significant change method is not suitable for rapid assessments, but may be useful in long-term studies.

- A case study using this tool may be found in: Wilder, L and Walpole, M 2008. Measuring Social Impacts in conservation: experience of using the Most Significant Change method. Oryx, Volume 42, 529-538, at the following link: http://www.mande.co.uk/blog/wp-content/uploads/2010/08/2008-Measuring-social-impacts-in-conservation-Wilder-Walpole.pdf

- A step by step explanation for the application of the most significant change method can be consulted in: Davies, R. and J. Dart 2005. The 'Most Significant Change' (MSC) Technique A Guide to Its Use. http://www.mande.co.uk/docs/MSCGuide.pdf

## 8 Vulnerability and Capacity Assessment: International Red Cross

The Red Cross, like many disaster relief organizations, is increasingly working with communities to help them develop their resilience to disasters. As part of this program, the Red Cross has updated their Vulnerability and Capacity Assessment tool kit (VCA) (IFRC, 2007). This is a community-based tool that enables communities to first identify vulnerabilities and subsequently develop an action plan to increase their own capacity to address many of the issues. As such, this is not conceived as a rapid assessment tool, but nonetheless contains a series of relevant points for a CITES approach.

This tool describes in detail how to make a social impact assessment. It stresses the importance of the choice of methods depending on the situation, highlighting that some methodologies may be more appropriate than others in different settings and, lastly, emphasizes the importance of triangulation to verify the results. The manual presents a format for collecting data on the assets and resources associated with livelihoods and household level activities, and a matrix that summarizes the results.

More information on this tool may be found in: IFRC 2007. VCA toolbox with reference sheets. International Federation of Red Cross and Red crescent societies. International Federation of Red Cross and Red Crescent Societies, Geneva, Switzerland http://www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

**TABLE 3.** IFRC MATRIX FOR DATA COLLECTION ON LIVELIHOODS, HOUSEHOLD ASSETS, AND RESOURCES

| Naturals | Physical | Financial | Human | Social |
|---|---|---|---|---|
| Land | Tools and equipment | Savings | Education | Community groups |
| Water supply | Transport links | Access to credit | Training | Kin that resides elsewhere |
| Forest resources | Water supply/ taps | | Skills | Religious groups |
| Fishing resources | | | | Political groups |
| Wild plants | | | | Social networks |

## 9 Nature's Investment Bank: The Nature Conservancy

The Nature Conservancy's Nature's Investment Bank report compares the livelihoods of people living in areas containing a Marine Protected Area (MPA) with those living in areas without MPAs in order to assess the potential benefits of protected areas (Leisher et al., 2007). Researchers used a conceptual framework of opportunities, empowerment and security developed by the World Bank. They measured aspects of this framework using focus group discussions, stakeholder interviews, and small group household surveys. Over 1000 people in four areas of the Pacific were interviewed, and the researchers spent approximately 30 days at each site. The household surveys included qualitative data collection using indicators of improvement such as "fish catches have increased" with possible responses including "strongly agree, agree, don't know, disagree, and strongly disagree". Finally, opportunity or welfare indicators were plotted on radar plots for a graphic comparison of measures associated with marine protected areas and those not associated with MPAs. Researchers concluded that marine protected areas were associated with improved fish catches; new jobs, mostly in tourism; stronger local governance; benefits to health; and benefits to women. It should be noted that this study was site based. The table below lists the areas of activity analyzed, adapted by Leisher et al. (2007)

- The Nature Conservancy tool may be found in: Leisher, C, van Beukering, P. and Scherl, L.M. 2007. *Nature's investment bank. How marine protected areas contribute to poverty reduction. The Nature Conservancy*, Washington, USA. http://www.nature.org/media/science/mpa_report.pdf

## 10 Formulation of methodologies for the Evaluation of Impacts on Livelihoods: ODI / AWF

The ODI/AWF (Overseas Development Institute/African Wildlife Foundation) tool was designed to assess how conservation projects are impacting livelihoods. The approach employs a multi-disciplinary team but is somewhat time consuming – both for the assessors and for the local participants - as the main visit to each project lasts between 7-10 days. The report does, however, provide a useful summary of a variety of assessment tools and presents examples of a framework for data collection and analysis (Figure 1). It also provides examples of topics that could be covered in the assessment (Table 4).

Although the ODI tool is site-based and very labor intensive, it could potentially be modified for a more overarching process, if such simplification does not go against the livelihoods ethos. Concerns have also been voiced over the usability of indicators derived in a participatory manner and over the difficulty of integrating participatory data with other data. In addition, there have been questions raised over the separation of results by gender, as well as over Sustainable Livelihoods Approach's (SLA) failure to consider issues such as empowerment, politics and power.

**TABLE 4.** FOCAL AREAS OF LIVELIHOODS AS ANALYZED BY LEISHER ET AL (2007)

| OPPORTUNITES | EMPOWERMENT | SECURITY |
|---|---|---|
| Income | Governance Mechanisms | Health |
| Housing | Community Participation | Social Cohesion |
| Luxury Goods | Benefits to Women | Cultural Traditions |
| Fish Catch | Access and rights | |
| Education | | |
| Alternative Livelihoods | | |



**FIGURE 2.** LIVELIHOODS ASSESSMENT USINGTHE METHODOLOGY OF THE OVERSEAS DEVELOPMENT INSTITUTE AND THE AFRICAN FOUNDATION FOR WILDLIFE (IN ASHLEY AND HUSSEIN, 2000).

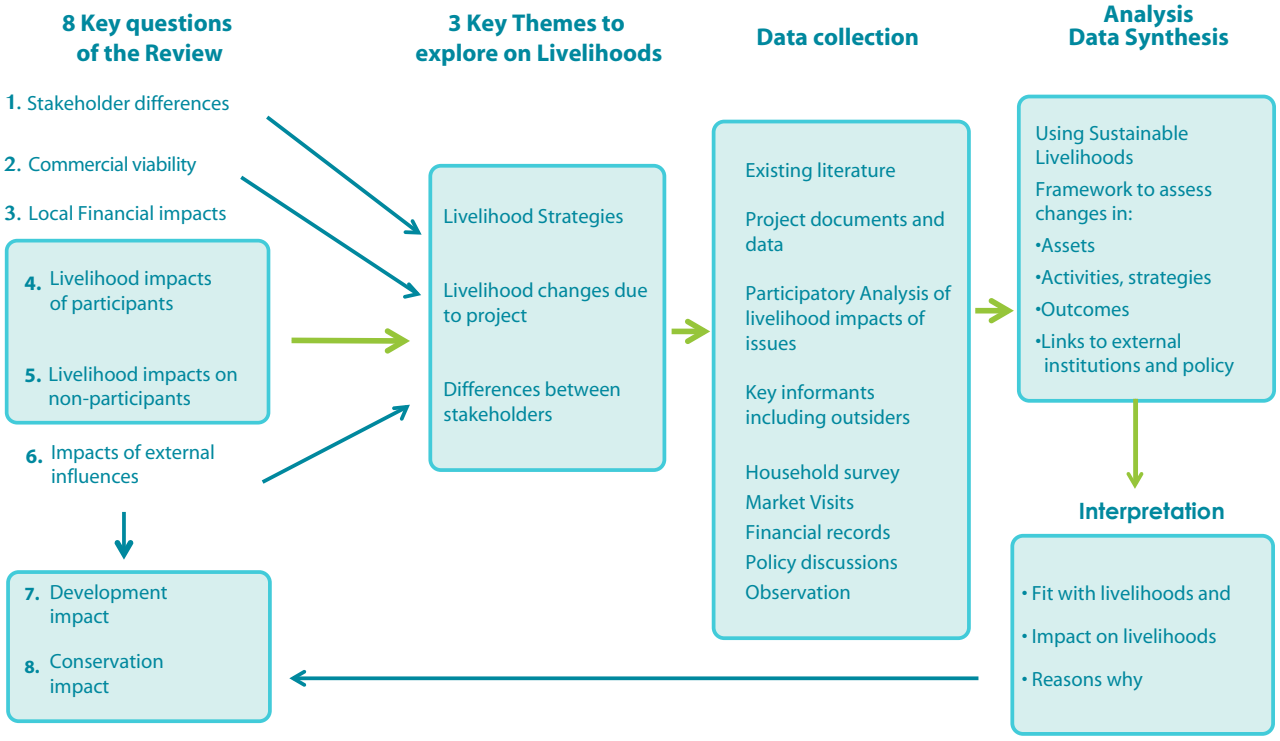



**TABLE 5.** ODI/AWF. TOPICS FOR A PARTICIPATORY ASSESSMENT OF LIVELIHOODS IMPACT (PALI) PROCESS (ASHLEY AND HUSSEIN 2000)

| Topic | Activity | What can be learned |
|---|---|---|
| Current livelihood activities | List pros and cons | Livelihood strategies. Criteria for judging them. |
| | • Rank according to:<br>• Contribution to income<br>• Preference<br>• Importance to HH. Discuss | Key activities and assets. Ball park figures for income from different activities. Values other than cash income. Criteria can then be discussed/ expanded/ ranked. |
| | Generate criteria for scoring activities and construct matrix. | As above, but more complex. Focus on locally generated criteria (which can then be ranked). Scoring against criteria is easier to visualize for consensus building and comparing across SH groups. |
| | Incorporate the wildlife enterprise in the above. | How wildlife enterprise fits into strategies, how it meets livelihood criteria. |
| | Construct matrix of activities and needs | What needs are, which activities are pursued and why. Which activities have multiple functions |
| | Construct matrix of positive and negative impacts of WE on other activities | Impacts of PROJECT on other livelihood activities |
| | Carryout any of the above in stakeholder groups | Differences between SHs in terms of activities, strategies, and impacts. |

| Topic | Activity | What can be learned |
|---|---|---|
| Seasonality | Construct matrix or discussion of seasonality of income, work, food availability. | Livelihood strategies. Main needs. Human Capital availability. |
| Wealth ranking | Carry out wealth ranking of participants and explanation of criteria. | Stakeholder identification. Local criteria for livelihood security. |
| | Compare with previous wealth ranking. | How people move in and out of poverty and why? |
| Scenario-building (positive and negative) | Paint picture (verbally or literally) of positive and negative future – in general or resulting from this enterprise. | Long-term trends. Long-term impacts of project. Useful if going on to joint planning. |
| Current assets and resources | Discuss what are the assets and resources you currently rely on to support the family (building blocks). How? | Should identify livelihood assets, and relative importance. |
| Constraints | Discuss: What are the constraints that prevent livelihood improvement? | Encourages focus on external influences. |
| Pros and Cons of WE | List pros and cons | Direct and indirect impacts of project. |
| | Rank pros and cons | Priority concerns, significance of impacts |
| | Identify who bears and receives benefits | Distribution of impacts between stakeholders |
| Participation in the project | Discuss who does and who does not participate. Why? | Stakeholder roles. Impacts as perceived by each. |
| | Discuss how participants are selected. | Barriers to participation (external or internal). |
| Expenditure of earnings | Rank/ matrix of items of expenditure. Who decides? | Impact of earnings (e.g. on needs, HH assets). Who benefits |
| Time-line and trends | Construct time line. Discussion of key events and gradual trends. How have people coped or adapted? How are they preparing for the next change? Household action, community action. | Adaptive livelihood strategies and coping strategies. Influence of external policies and organizations. Dynamic processes. Role of internal organization. |
| Changes and causes | Construct matrix of recent major changes and their causes, then rank the most influential causes of each. | Changes in livelihoods over time. Role of external influences. Significance or not of the project as a major influence. |



The authors stress the importance of involving participants for a full understanding of impacts and how to address them as well as recognizing that different wealth and gender groups will be impacted differently.

This tool is available at:

- Ashley, C. & Hussein, K. 2000. Developing Methodologies for Livelihood Impact Assessment: Experience of the African Wildlife Foundation in East Africa. ODI/ AWF. http://www.odi.org.uk/resources/download/2032.pdf

## 11 Tool for the Protected Areas Benefits Assessment (PA-BAT): WWF

The WWF Protected Areas Benefits Assessment Tool (PA-BAT) was originally designed to assess the benefits of protected areas for a specific study, but it has since been developed as a more general tool and may be applicable to areas other than protected areas (Dudley & Stolton, 2008). The tool is based on the conceptual framework of the Sustainable Livelihoods approach developed by DfID (1999) and OECD (2001).

The WWF tool is an assessment tool; it was not designed as a monitoring tool. It does not record illegal use and or specific quantitative economic values, but rather it assesses qualitative values. The Tool consists of two sections to be completed at each site:

I. The first section collects specific information on the site name etc. and the team makes a qualitative evaluation of overall contributions to well-being.

II. The second section collects information on the benefits to protected area stakeholders such as: the types of benefits; who they are important to; qualitative information about their level of importance; their relationship to the protected area, and; the times of year during which they are important. For example, an assessment of the benefits of hunting includes the questions listed below:

Is hunting/plant collection/ medicinal use:

- Of minor importance to subsistence?
- Of major importance to subsistence?
- Of minor importance as a source of revenue?
- Of major importance as a source of revenue?
- Of sacred value to identified stakeholders?

The guide recommends that "a broad range of stakeholders should be involved in carrying out the assessment, for example in a workshop involving park staff, local communities and others with an interest in the site. In this case there may be competing views about various benefits and it is possible that alternative views may have to be represented – for instance positive benefits for some stakeholders may be matched by negative impacts on others which will need to be recorded in the comments section of the report".

Some examples of stakeholders included in the WWF PA-BAT assessment are: indigenous peoples in protected areas; other inhabitants of protected areas; national population; government, and; the global community.

Additional information about the tool may be found in:

- Dudley, N and Stolton, S. 2008 (revised 2009). The Protected Areas Benefits Assessment Tool: A methodology. WWF, Gland, Switzerland. Download: http://wwf.panda.org/?174401/PABAT

## 12 Cambridge Conservation Measures Partnershipn

In an effort to respond to a call from the scientific community for more empirical data on the success of conservation interventions, a Cambridge based consortium has developed a spreadsheet to guide organizations in assessing project success (Kapos et al., 2008). This tool includes a series of questions aimed at measuring aspects related to livelihoods that may be relevant in a CITES context. The tool is particularly useful for the establishment of a monitoring and evaluation scheme as per Step No. 6 of this Guide.
The spreadsheet is available at:

- Cambridge Conservation Forum. Harmonising Conservation Measures of Success (2012). Online: http://www.cambridgeconservationforum.org.uk/initiative/harmonising-measures-conservation-success

## 13 Design of Strategies to Increase the Competitiveness of Smallholder Production Chains: CIAT

This field manual, prepared by the International Center for Tropical Agriculture (CIAT), is organized into 10 modules that take the user through a series of steps in order to select the value chain, identify the actors, design market intelligence reports, and negotiate competitive strategies as well as monitor and evaluate them. This process of strengthening rural value chains is of special importance to CITES. First, because it demonstrates how to map out the value chain (module 7), but also because it establishes measures that promote the sustainable use of resources and strengthened entrepreneurship in poor rural communities. When mapping out the value chain, it is crucial to ask questions regarding the makeup of the actors that it comprises, namely:

- Who are they?
- Where are they located?
- What are their roles in the value chain?
- How do they relate to and work with each other? Are the relationships good, fair or poor? Why?
- What are their characteristics? (Gender, age, education, skills, know-how, etc.)

The CIAT field manual is available online at:

- Lundy & Gottret. 2004. Design of Strategies to Increase the Competitiveness of smallholder chains: Field Manual. CIAT http://ciat-library.ciat.cgiar.org:8080/jspui/handle/123456789/1098. La versión en español en:http://ciat-library.ciat.cgiar.org:8080/jspui/handle/123456789/1093

## 14 Assessing the impact of conservation and development on rural livelihoods: Using a modified Basic Needs Survey in rural communities: WCS

This methodology, developed by the Wildlife Conservation Society (WCS), is built on a modification to the Basic Needs Survey developed by Rich Davies for Action Aid in 1998. It focuses on evaluating whether the conservation of biodiversity and mitigation of impacts on local families have a positive or negative influence on poverty and livelihoods. The methodology presents several concepts and activities that measure local livelihoods. It also provides a framework that examines how one might attribute positive or negative changes to livelihoods to conservation, regulatory and/or development activities and policies.

The WCS methodology contains a series of simple steps that gives the reader an understanding of how to 1) prepare a list of assets and services that cover basic needs; 2) obtain data from the Basic Needs Survey, and; 3) analyze said data. It also explains how to set indicators at both the municipal and household level, which is later exemplified by a case study. This methodology may prove to be beneficial to those facing time constraints, given that it is both relatively short, yet specific and to the point.

This methodology is available online at:

- Wilkie, D., Wieland, M. and Detoeuf, D. 2015. A guide to the modified Basic Necessities Survey: Why and how to conduct BNS in conservation landscapes. WCS, New York, USA. http://globalinitiatives.wcs.org/DesktopModules/Bring2mind/DMX/Downloadaspx?EntryId=28192&PortalId=97&DownloadMethod=attachment.

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WCS,2012. Assessing the impact of conservation and development on rural livelihoods: Using a modified Basic Necessities Survey (BNS) in experimental and control communities.

Wilkie, D., Wieland, M. and Detoeuf, D. 2015. A guide to the modified Basic Necessities Survey: Why and how to conduct BNS in conservation landscapes. WCS, New York, USA.

Wilder, L and Walpole, M 2008. Measuring social impacts in conservation: experience of using the Most Significant Change method. Oryx, Volume 42, 529-538.

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# Annex I: Conceptual Framework on Sustainable Livelihoods (Sustainable Livelihoods Framework)

Before undertaking a Rapid Rural Assessment of impacts resulting from the inclusion of species in CITES on livelihoods, it is useful to contemplate the conceptual framework out of which the array of tools presented in this guide originate.

Livelihoods are increasingly recognized as involving more than just economic factors, i.e. they are multidimensional (World Bank 2000; Kusters et al., 2005), and a number of conceptual frameworks have been developed to guide livelihood assessment given this characterization. The most encompassing and basic framework accepted by the international community is the Sustainable Livelihoods Approach or Framework (SLA or SLF), developed by DFID (1999) and OECD (2001), which is used to gain a better understanding of livelihoods, especially those belonging to the most disadvantaged populations.

The SLF examines the main factors impacting peoples' livelihoods, as well as the most common relationships among them. It may be used both to plan new development activities and to assess how existing activities might contribute to the sustainability of livelihoods, in this case playing an important part in assessments of the impact of the implementation of CITES-listings. The SLF does not claim to be an exact representation of reality. Its objective is to offer a variety of perspectives to stakeholders, thus fostering a coherent and structured dialogue on the different factors impacting livelihoods, their relative importance, and how they might interact. To that end, it assists in identifying appropriate starting points for supporting livelihoods.

The SLF is primarily people-centered. It is based on the idea that rural communities require a wide variety of assets in order to better their livelihoods. There is no one category of assets that may alone achieve the multiple and varied objectives these communities pursue.

The SLF employs the "Five Capitals" approach (Green, 2008):

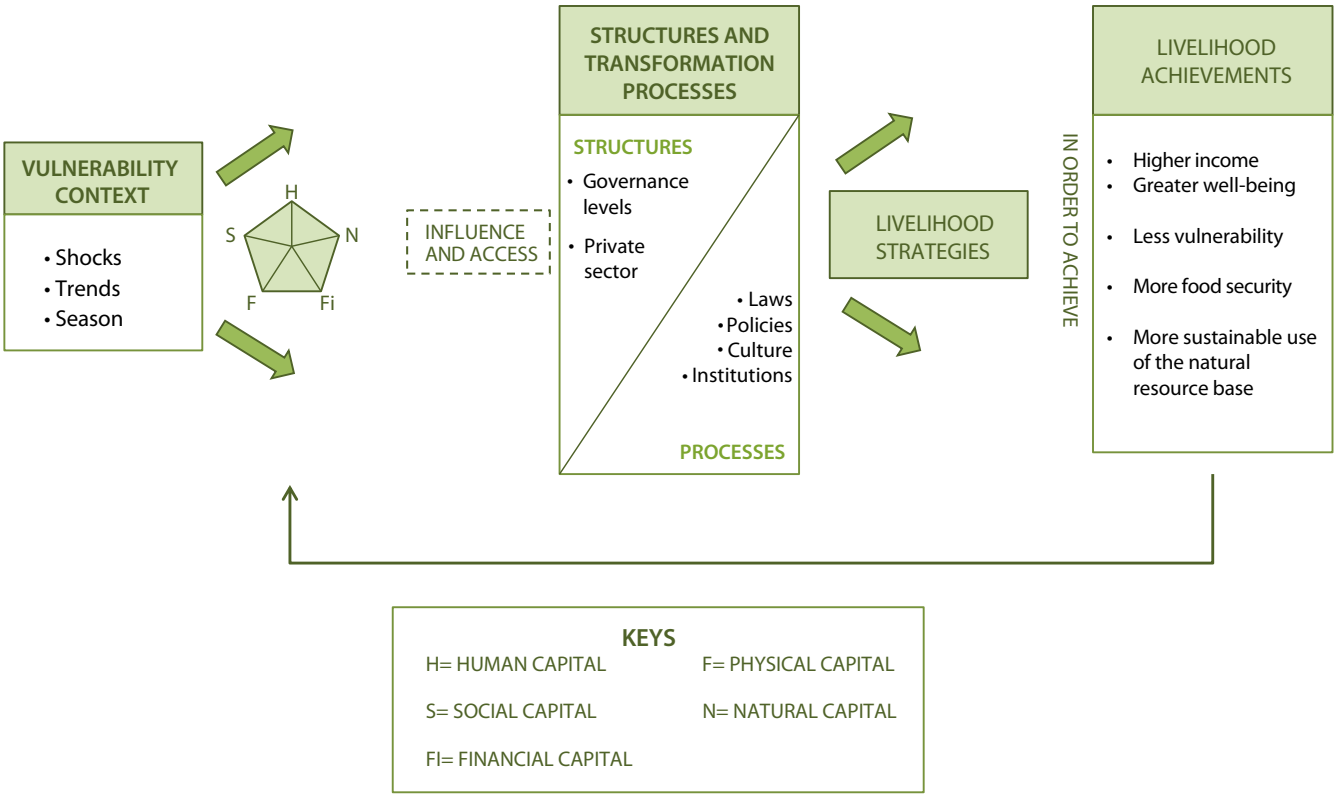
1. Human: skills, knowledge, ability to work, and good health
2. Social: The social resources upon which people rely, including informal networks with individuals or institutions such as political or civic bodies; memberships to more formal groups such as churches; and relationships of trust, reciprocity and exchange.
3. Natural: Stocks of natural resources upon which people depend, including common resources, land, water etc.
4. Physical: The basic physical infrastructure (shelter, transportation, irrigation, energy etc.) and processed goods required for livelihoods.
5. Finance: savings, wages, remittances and government transfers such as pensions.

This approach recognizes that rural communities' livelihoods and well-being are dependent on a complex array of issues (DFID, 1999; OECD, 2001; Carney et al 1998). The SLF is widely used in the development context and the approach, with appropriate modifications, has been used by organizations such as DFID, Save the Children, OXFAM GB and Oxfam South Africa, among others. Using the DFID's five capitals as a starting point, some organizations have modified the approach to include issues such as empowerment and politics. In contrast, others have reduced the framework to a more manageable triumvirate of assets, capacities and activities (de Stage, 2002).

As approaches evolve, focusing increasingly on rights, different emphasis is placed on concepts such as empowerment, governance, security, the health of the poor, hunger, assets, capabilities, and activities, depending on the objective of the organization carrying out the assessment. The World Bank, for instance, maintains that opportunities, empowerment and security are key issues. Consequently, both development and conservation agencies often use their own variations on the SLA theme.

Kusters et al. (2005) describe their use of the five capitals approach and the indicators they developed for use at the household, community and national levels in their CIFOR report, "*A method to assess the outcomes of forest product trade on livelihoods and the environments*". This approach provides a simple starting point for Parties that wish to to initiate and develop their own methods, particularly with regards to the national level indicators.

**FIGURE 3**. SUSTAINABLE LIVELIHOODS FRAMEWORK




Source: DFID, 1999

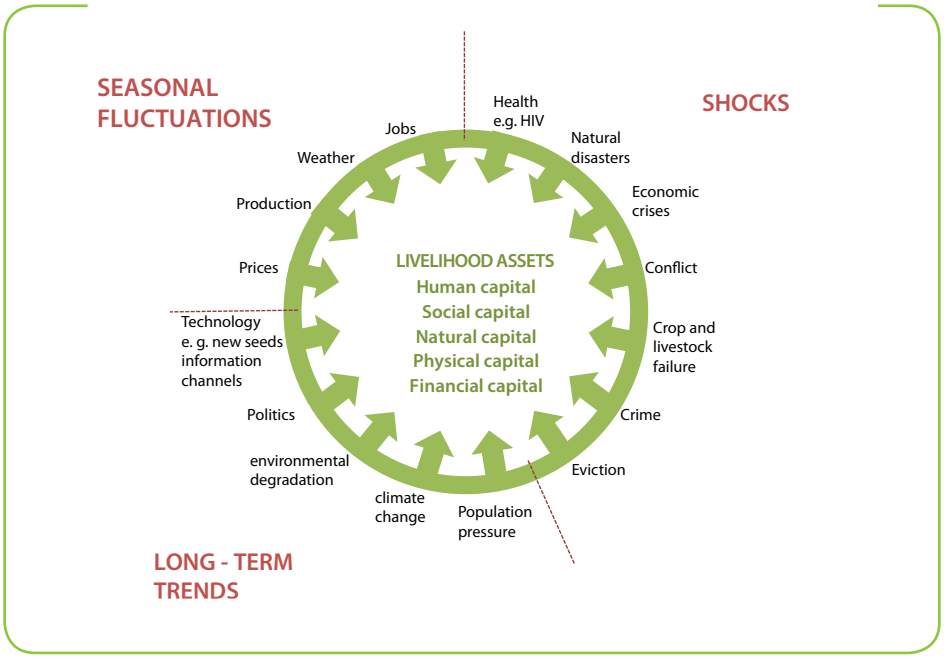
# Annex II. Definition of poor rural communities for the purposes of CITES

Traditionally, "the poor" have been characterized in development literature as those who earn less than US $ 1-2 per day (World Bank, 2001), in other words by their purchasing power. According to this characterization of the poor, it is generally recognized that the poor have less access to: resources (adjusted for purchasing power parity), opportunities, power, low infant mortality rates and literacy. Of those living on less than US $ 2 a day, about 70% live in rural areas (IFAD, 2001) in which chronic poverty is associated with isolation and a lack of integration into society (Sunderlin et al, 2005; Woodhouse, 2002). Among the rural poor are those who are landless, those with a low revenue base, smallholders, pastoralists, rural women, ethnic minorities and indigenous populations (World Bank, 2003).

For the purposes of CITES, "the poor" can be considered as the rural poor or poor communities directly involved in the collection of specimens from the wild as part of their livelihoods. These are the people with the fewest alternatives to harvesting or processing wild products, or that are otherwise dependent on the ecosystems necessary to support the species that supply such products, and those who use wildlife as part of their adaptation strategies.

The concept of vulnerability adopted by this Handbook, is understood by Green (2008) as "that which describes the reduced ability of some communities or households to cope with events and stressors to which they are exposed." These stressors may be disasters, the death of a family member, illness, theft, eviction, loss of employment or a harvest, or drought or conflict affecting the entire community. Such events can lead poor families into a spiral of increased vulnerability and poverty. Although the concept of vulnerability is conceptually similar to poverty, it focuses on power relations, connections and exclusions that exist in society. The most vulnerable are thus marginalized groups with weak networks and connections that further impoverish their resilience.

**FIGURE 4**. HOW VULNERABILITY AFFECTS LIVELIHOODS

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# HANDBOOK ON CITES AND LIVELIHOODS

## Part II

### Addressing and mitigating the effects of the application of CITES decisions on livelihoods in poor rural communities

Organization of American States | More rights for more people

ISBN 978-0-8270-6362-4

# HANDBOOK ON CITES AND LIVELIHOODS

PART II

Addressing and mitigating the effects of the application of CITES decisions on livelihoods in poor rural communities

General Secretariat of the Organization of American States (GS-OAS)

Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

WASHINGTON D.C.

June 2015

Organization of American States | More rights for more people

**OAS Cataloging-in-Publication Data**

Organization of American States. Department of Sustainable Development.
Guía práctica sobre la CITES y los medios de subsistencia: Parte 2: Abordando y mitigando los efectos de las aplicaciones de decisiones de CITES en los medios de subsistencia / [Preparado por el Departamento de Desarrollo Sostenible de la Organización de los Estados Americanos en colaboración con la Secretaría de la Convención sobre el Comercio Internacional de las Especies Amenazadas de Fauna y Flora Silvestres (CITES)].
p. : ill. ; cm. (OAS. Documentos oficiales; OEA/Ser.D/XXIII.25.2)
ISBN 978-0-8270-6362-4
1. Endangered species. 2. Wild animal trade. 3. Wild plant trade. 4. Sustainable development.
I. Title. II. Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973).
III. Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres (1973)
IV. Organization of American States. Executive Secretariat for Integral Development. V. Series.
OEA/Ser.D/XXIII.25.2

The information contained in this guide is based on the CITES & Livelihoods document CoP 16 Inf.21

Part 2: Handbook on CITES and Livelihoods: Addressing and mitigating the effects of the application of CITES decisions on livelihoods in poor rural communities. Prepared by the CITES Secretariat and the Working Group on CITES and Livelihoods. Edited by Rodrigo Martinez, consultant at the Department of Sustainable Development of the General Secretariat of the Organization of American States

Artwork, layout and design: Fredy A. Fonseca Ochoa



Foreign Affairs, Trade and Development Canada

Affaires étrangères, commerce et Devéloppement Canada

The financial support provided by the Government of Canada to this initiative through the Department of Foreign Affairs, Trade and Development (DFATD) is greatly appreciated

# Addressing and mitigating the effects of the application of CITES decisions on livelihoods in poor rural communities

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# Acronyms

CBD: Convention on Biological Diversity

CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora

CONACS: National Confederation dos Agente Comunitarios Saude

FFI: Fauna & Flora International

FSC: Forest Stewardship Council

FWS: Fair Wild Standard

IMO: Institute of Market-ecology

INRENA: National Institute of Natural Resources of Peru

ISSC-MAP: International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants

SIPPO: Programme for the Promotion of Imports from Switzerland

TRAFFIC: The Wildlife Trade Monitoring Network

UEBT: Union for the Ethical Biotrade

# Background

This second part of the Handbook on CITES and Livelihoods provides an in-depth discussion of activities and solutions that may be employed to address the impacts resulting from listing species in CITES on poor rural communities. It proposes mitigation and sustainable use measures that attempt to address the findings of the participatory rural appraisals carried out in Part I of the Handbook. However, in the event that a participatory rural appraisal has not been carried out prior to consulting this document, the information that follows can nonetheless contribute to the development of initiatives promoting the sustainable use of species.

Modifying species conservation programs so that they comply with CITES regulations may in turn disproportionately affect poor rural communities, as is discussed in Part I of this Handbook. More specifically, the implementation of decisions to include species in Appendix I and, to some extent, in Appendices II and III, imposes restrictions on trade and may limit the access of rural communities seeking legal trade, particularly in the short term. Changes in demand and access to trade opportunities will affect the suppliers of raw materials derived from CITES species (TRAFFIC, 2008) unless mitigation measures or livelihood alternatives are made available. In general, well managed projects promoting the sustainable consumptive and non-consumptive use of resources can help either maintain or restore CITES species populations, strengthen consumers' confidence in the sustainability of the use of the species, and generate income for poor rural communities.

Compliance with restrictions on trade will slow overexploitation, providing communities with long-term access to the resource in question. Favorable situations may also be generated when trade restrictions lead to higher prices and thus income (added benefits include moving to more sustainable production systems or alternative uses of the species), provided that those gains are distributed equitably along the value chain and do not incentivize illegal trade. Benefits may manifest themselves in additional ways, such as through improved education and capacity building, potentially leading to the adoption of such measures in other places and for other species.

However, negative impacts may also be generated if the population of a species depleted by unsustainable use and traffic is revitalized, such as in the case of megafauna whose behavior, including attacking crops or livestock, may lead to conflicts between people and species (Jones, 2009; Woodroffe et al., 2005). If adequate compensation and / or mitigation and the protection and livestock are not provided, poor rural communities with few resources and alternatives may be severely affected. In cases such as this, mitigation solutions could include ecotourism focused on charismatic species (Trong and Drews, 2004), and the promotion of sport hunting activities (Weaver and Skyer, 2003), both of which could help to strike a balance between the income received by the rural poor and the risk posed by the megafauna.

This second part of the Handbook proposes a process comprised of six steps that outlines how Parties can address impacts and promote the sustainable use of resources and species. The steps may be used to focus on a particular species, or may be implemented at the national level in order to promote policies and strategies associated with the sustainable use of CITES species.

### Purpose of this Handbook

The purpose of Part II of this Handbook is to present relevant concepts and lessons learned originating from case studies on the sustainable use of CITES and non-CITES species. In addition, it provides six steps that aim to contribute to the establishment of coherent national policies and local incentives focused on mitigating the impact of CITES listings and promoting the sustainable use of CITES species, as listed below.

# Steps to mitigate impacts and promote the sustainable use of CITES-listed species

**STEP 1** IDENTIFY PRIORITY SPECIES AND REVIEW EXISTING LEGISLATION ON THE USE OF THE SPECIES

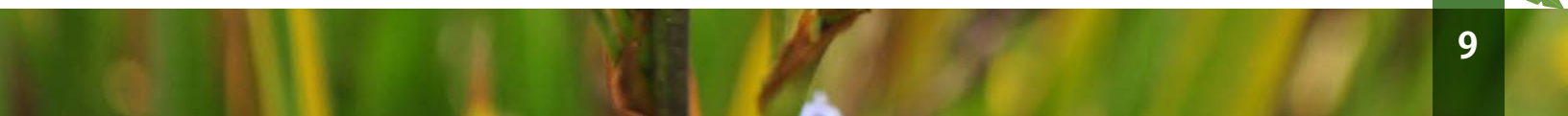
**STEP 2** GENERATE A DATABASE OF SCIENTIFIC AND TECHNOLOGICAL INFORMATION FOR THE SUSTAINABLE USE OF THE SPECIES

**STEP 3** EMPOWER POOR RURAL COMMUNITIES

**STEP 4** DESIGN INCENTIVES AND DEVELOP MARKETING STRATEGIES TO PROMOTE IN-SITU AND EX-SITU PRODUCTION

**STEP 5** PROMOTE ENGAGEMENT AND COOPERATION BETWEEN RELEVANT GOVERNMENTAL AGENCIES

**STEP 6** MONITOR AND EVALUATE THE IMPACTS OF MITIGATION AND SUSTAINABLE USE PROMOTION MEASURES



# Step 1. Identify priority species and review existing legislation on the use of the species

**1.1 Identify the targeted species that will receive support. In order to do so you must select a species from one of the following categories:**

1.1.2 Species that have benefited from a Participatory Rural Appraisal, such as one carried out using the instruments detailed in Part I of this Handbook.

1.1.3 CITES-listed species for which an impact appraisal has not yet been carried out. In this case, Parties must ensure that the species are being used by poor rural communities for commercial and subsistence purposes, representing one of its main sources of income.

**1.2 Analyze the results of the Participatory Rural Appraisal once it is complete, in order to make use of the information collected.**

**1.3 Analyze the relevance of reviewing lessons learned from species not included in CITES**

1.3.1 Information collected on the use of non-CITES species or higher taxa may be of some relevance. CITES-led studies on swiftlet bird nests (Collocalia spp.) and sea cucumbers (Holothurians - Harpagophytum spp.) consumed as food, for instance, provide some valuable lessons learned. Such literature that looks at the sustainable use of species is abundant and can make the learning curve associated with the sustainable use of CITES species more manageable. It would be especially useful to cosult literature that deals with species that are not yet listed in CITES, but that are likely to be listed in the future.

**1.4 Assess the implementation of measures listed in Article VII of the Convention**

1.4.1 With regards to species included in Appendix I of CITES, it is recommended that Parties analyze the measures that take into account the exemptions listed in Article VII of the Convention, such as those related to captive breeding and artificial reproduction. The adoption of quota systems or measures to encourage the development of sustainable production systems can lead to the transfer of the national population of a species from Appendix I to Appendix II.

**1.5 Review the legislation and regulations of each country and region**

1.5.1 Inquire about the authorization processes, permits and transaction costs associated with production in captivity and extraction of wildlife for commercial use, with the appropriate environmental authority.

1.6 Postpone the entry into force of the decisions

1.6.1 Parties may consider the adoption of a flexible approach to the entry into force of CITES listings in order to ensure that there is sufficient time to implement the inclusions, and that the trade carried out in the framework of the listing is both legal and sustainable (e.g. sturgeon, seahorses, eels).

# Step 2. Generate a database of scientific and technological information for the sustainable use of the species

**2.1 Establish links with universities and research centers**

2.1.1 The establishment of alliances and agreements with biodiversity research centers as well as a budget that allows for scientific and technological research on ex-situ and in-situ production is essential for the design of sustainable extraction and production protocols intended for rural communities.

2.1.2 Establish partnerships with institutions that set quality, sanitary and phytosanitary standards and controls in order to comply with market standards. At this point, research on how to meet market standards will need to be undertaken. For example, both the US and in Europe require that medicinal plants derived from developing countries undergo toxicity tests. Such tests may entail substantial costs that could be covered by partner organizations.

# Step 3. Empower poor rural communities

**3.1 Education and public awareness**

3.1.1 Design public awareness campaigns, disseminate information, and conduct workshops with poor rural communities on the value of the sustainable use of the species, and the benefits to be gained by participating in community-based sustainable use programs.

3.1.2 Support the main users of wild products (eg. gatherers, farmers, administrators or other groups) in the creation of socially responsible associations or similar bodies that help create a governance structure for decision-making purposes.

3.1.3 Promote the adoption of extraction protocols and fair and sustainable trade standards in poor rural communities.

**3.2 Design mechanisms for the equitable distribution of benefits**

3.2.1 Design and implement participatory mechanisms for the rural poor that allow for the fair distribution and sharing of benefits resulting from the trade of CITES species.

3.2.2 Together with the rural community, design strategies to ensure that those affected by the implementation of the inclusion of species in CITES Appendices support the monitoring of the implementation and enforcement of the law to counter the trafficking of species.

3.2.3 Should cultural norms permit, establish specific strategies to expand the participation of women in productive, managerial and commercial activities.

**3.3 Analyze poor indigenous and rural communities' access to resources and land tenure**

3.3.1 Establish a plan and mechanisms that facilitate access to both the resource and land tenure as a strategy for sustainable use of the resource and the long-term welfare of the communities.

# Step 4. Design incentives and develop marketing strategies to promote in-situ and ex-situ production

**4.1 Carry out market and production technology research**

4.1.1 Conduct a study of the market structure in order to find out where value-added can be generated in the processing and marketing of the species or product, as well as to gather knowledge on potential clusters that can create a favorable environment for trade.

4.1.2 Conduct a local, national or international market study of the species to ascertain consumer preferences, negotiation terms (price, quality, volumes, seasons) and potential competitors in the sector or niche market.

4.1.3 Conduct a study of available national or international technologies (or prospective technologies) for reproduction in captivity or in-situ if appropriate, including value-added technologies (transformation, processing and transportation of the product or its parts).

**4.2 Develop viable business and community initiatives**

4.2.1 Encourage the development of prospective business ideas or initiatives so that poor rural communities may implement ex-situ production practices. The first step in strengthening promising business initiatives is the development of robust business plans, which could be supported by organizations that assist the development of micro and small businesses.

4.2.2 Establish agreements with local and national organizations that support entrepreneurship and trade promotion such as chambers of commerce, export promotion agencies and universities in order to effectively provide assistance while avoiding the duplication of efforts.

4.2.3 Conduct producer surveys in order to discern the need for access to microloans or other economic incentives that will aid the processing of products in order to meet market demands, for both the in-situ and ex-situ extraction of species.

4.2.4 Cultivate business linkages between domestic producer associations, international traders, and importers of CITES species.

4.2.5 Analyze the feasibility of establishing alternative production systems including agriculture, forestry or fishing that will help to diversify the source of income for poor rural communities and reduce the demand for CITES-listed species.

**4.3 Mitigate conflict between humans and wildlife**

4.3.1 When necessary, conduct an assessment of the potential impacts and losses caused by wildlife, particularly in the case of megafauna whose previously depleted stocks are in recovery. Depending on the case, evaluate together with the potentially affected communities the investments necessary to protect crops and livestock.

# Step 5. Promote engagement and cooperation between relevant governmental agencies

5.1 Define a technical, cross-sectoral work plan involving government agencies that deals with issues related to land and property rights, agriculture, conservation, rural development, trade and industry.

5.2 Interact and plan with international cooperation agencies to attract financial and technical support for the development of mitigation measures at the national level, or for each individual species at the local level.

5.3 Promote south-south knowledge exchange programs between stakeholders, national authorities, conservation agencies and international development experts related to the community management of natural resources.

# Step 6. Monitor and evaluate the impacts of mitigation and sustainable use promotion measures

**6.1 Define a framework for the monitoring and evaluation of measures pursued.**

6.1.1 Select indicators to evaluate business development initiatives.

6.1.2 Select social development indicators in accordance with the indicators selected in Part I of the Handbook

Questions that should be asked during the monitoring process include:

- Has the likelihood of conserving habitats and species of interest to the project increased? How has this benefited livelihoods?
- To what extent are the positive results likely to last in the long term?
- Are increased earnings attributable to the support received by the project?
- Have the successful experiences and failures of the project been documented and disseminated?

6.1.3 A useful tool for the monitoring and evaluation of impacts on the use of species was developed by the Cambridge Alliance for Conservation Measures and may be found here: http://www.cambridgeconservationforum.org.uk/initiative/harmonising-measures-conservation-success

6.1.4 The Theory of Change methodology may also be of use. A Theory of Change is a specific and measurable description of an initiative for social change that constitutes the basis for strategic planning, decision-making and evaluation (The Center for Theory of Change, Inc., 2013). This methodology may be consulted in the following publication: Organizational Research Services. 2004. Theory of Change: A Practical Tool for Action, Results and Learning. Prepared for Annie E. Casey Foundation. http://www.aecf.org/m/resourcedoc/aecf-theoryofchange-2004.pdf. Additional Information about ToC is available online at: Center for Theory of Change:http://www.theoryofchange.org/library/publications/

The steps above may be validated through existing standards and sustainability certifications for the use of wild resources. These standards, to be discussed in further detail below, offer a wealth of knowledge on the principles and criteria that must be taken into account in order to ensure economic, environmental and social sustainability.

# Existing standards and certifications for the sustainable use of species

The sustainable use of a species entails three broad pillars.

I. The first pillar involves the environmental sustainability of the resource. Environmental sustainability implies that a constant supply of the species is maintained through sustainable harvesting practices, thus perpetually preserving a healthy number of stocks.

II. The second pillar focuses on the resource's social sustainability, wherein it is expected that trade generates benefits for poor rural communities, thereby improving their quality of life and strengthening their livelihoods while simultaneously respecting their cultural norms and traditional uses and practices.

III. The third pillar is based on the economic viability of productive initiatives. Economic viability implies that there is indeed a market for either the species or their parts. Demand must to be steady and income stable, and opportunities to meet the conditions of the market must be available. National and international regulations that permit the trade of the species are also required.

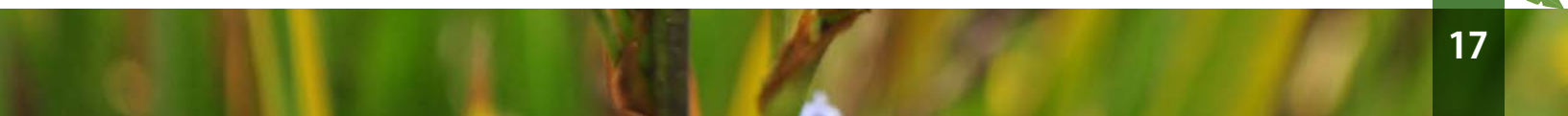
A number of sustainable use and fair trade standards as well as certification and verification seals are currently available. These standards and seals serve to ensure to consumers that the extraction or captive breeding of the species is carried out in a sustainable manner. In the event that the opportunity or viability of obtaining a certification for CITES species doesn't exist, the review of the following principles and criteria is still crucial to understanding the key elements and technical and management activities required for any project that seeks to promote the sustainable use of species.

Below are the four most relevant standards and certifications for CITES species that encompass principles and criteria for both timber and non-timber forest products, medicinal, aromatic and ornamental plants, and parts and products derived from wildlife.

TABLE 1: STANDARDS AND CERTIFICATIONS FOR SUSTAINABLE USE OF BIODIVERSITY

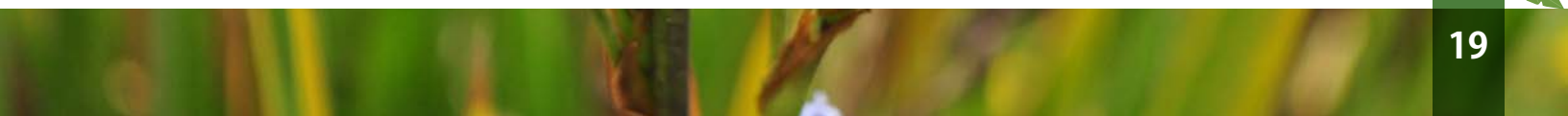
| Standard | Scope | Principles and Criteria |
|---|---|---|
| Forest Stewardship Council (FSC) | The principles and criteria of the FSC are applicable to all tropical, temperate, and boreal forests. Although the principles and criteria are primarily designed for forests managed for obtaining wood products, they are also relevant, in varying degrees, to forests managed for non-timber products and other services. More information at: http://www.fsc.org | **Principle 1: Compliance with Laws**<br>The Organization shall comply with all applicable laws, regulations and nationally- ratified international treaties, conventions and agreements.<br>**Principle 2: Workers Rights and Employment Conditions.**<br>The Organization shall maintain or enhance the social and economic wellbeing of workers.<br>**Principle 3: Indigenous Peoples' Rights**<br>The Organization shall identify and uphold Indigenous Peoples legal and customary rights of ownership, use and management of land, territories and resources affected by management activities.<br>**Principle 4: Community Relations**<br>The Organization shall contribute to maintaining or enhancing the social and economic wellbeing of local communities.<br>**Principle 5: Benefits from the Forest**<br>The Organization shall efficiently manage the range of multiple products and services of the Management Unit to maintain or enhance long term economic viability and the range of environmental and social benefits. |

| Standard | Scope | Principles and Criteria |
|---|---|---|
| | | **Principle 6: Environmental Values and Impacts**<br>The Organization shall maintain, conserve and/or restore ecosystem services and environmental values of the Management Unit, and shall avoid, repair or mitigate negative environmental impacts.<br>**Principle 7: Management Planning**<br>The Organization shall have a management plan consistent with its policies and objectives and proportionate to scale, intensity and risks of its management activities.<br>**Principle 8: High Conservation Values.**<br>The Organization shall maintain and/or enhance the High Conservation Values in the Management Unit, through applying the precautionary approach. |
| International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants (ISSC-MAP) (MPSG, 2007) | Designed to protect medicinal and aromatic plants (MAP).<br>For the ISSC-MAP, the term "medicinal and aromatic plants" includes plants used to produce pharmaceutical products, diet supplements, natural health products, beauty aids, cosmetics, and personal care items, as well as some products marketed in the culinary/food sector (B. Paetzold, personal communication). | **Principle 1. Maintaining Wild MAP Resources**<br>Wild collection of MAP resources shall be conducted at a scale and rate and in a manner that maintains populations and species over the long term.<br>1.1 Conservation status of target MAP species<br>1.2 Knowledge-based collection practices<br>1.3 Collection intensity and species regeneration<br>**Principle 2. Preventing Negative Environmental Impacts**<br>Negative impacts caused by MAP collection activities on other wild species, the collection area, and neighbouring areas shall be prevented.<br>2.1 Sensitive taxa and habitats<br>2.2 Habitat (landscape level) management<br>**Principle 3. Complying with Laws, Regulations, and Agreements**<br>MAP collection and management activities shall be carried out under legitimate tenure arrangements, and comply with relevant laws, regulations, and agreements.<br>3.1 Tenure, management authority, and use rights<br>3.2 Laws, regulations, and administrative requirements<br>**Principle 4. Respecting Customary Rights**<br>Local communities' and indigenous peoples' customary rights to use and manage collection areas and wild collected MAP resources shall be recognized and respected.<br>4.1 Traditional use, access rights, and cultural heritage<br>4.2 Benefit sharing |



| Standard | Scope | Principles and Criteria |
|---|---|---|
| | | **Principle 5. Applying Responsible Management Practices**<br>Wild collection of MAP species shall be based on adaptive, practical, participatory, and transparent management practices.<br>5.1 Species / area management plan collection practices.<br>5.2 Inventory, assessment, and monitoring<br>5.3 Transparency and participation<br>5.4 Documentation<br>**Principle 6. Applying Responsible Business Practices**<br>Wild collection of wild MAP resources shall be undertaken to support quality, financial, and labour requirements of the market without sacrificing the sustainability of the resource.<br>6.1 Market / buyer specifications<br>6.2 Traceability<br>6.3 Financial viability<br>6.4 Training and capacity building<br>6.5 Worker safety and compensation |
| FairWild (FW) Standard | | **WILD COLLECTION AND CONSERVATION REQUIREMENTS**<br>**Priciple 1. Maintaining Wild Plant Resources.** Wild collection of plant resources shall be conducted at a scale and rate and in a manner that maintains populations and species over the long term.<br>1.1 Conservation status of target species<br>1.2 Knowledge-based collection practices.<br>1.3 Sustainability of collection rate<br>**Priciple 2. Preventing Negative Environmental Impacts**.<br>Negative impacts caused by collection activities on other wild species, the collection area and neighbouring areas shall be prevented.<br>2.1 Sensitive taxa and habitats<br>2.2 Habitat (landscape level) management<br>**Priciple 3. Complying with Laws, Regulations and Agreements.**<br>Collection and management activities shall be carried out under legitimate tenure arrangements and comply with relevant laws, regulations and agreements.<br>3.1 Tenure, management authority and use rights<br>3.2 Laws, regulations and administrative requirements<br>**Principle 4. Respecting Customary Rights and Benefit-Sharing.**<br>Local communities' and indigenous peoples' customary rights to use and manage collection areas and wild-collected target resources shall be recognised, respected and protected.<br>4.1 Traditional use and practice, access rights and cultural heritage<br>4.2 Benefit-sharing |

| Standard | Scope | Principles and Criteria |
|---|---|---|
| FairWild (FW) Standard | The FairWild Standard addresses the chain of custody in four phases, from the to the final buyer. It applies to wildlife collection companies that seek to employ social and fair trade aspects in order to achieve sustainability. The FairWild Standard was designed by the Swiss Import Promotion Programme (SIPPO), Forum Ezzenzia, and the Institute for Market-ecology (IMO). In 2008 the FairWild Foundation was endorsed at the World Conservation Congress as the official administrator of the FairWild Standard and the ISSC-MAP and is responsible for the quality and implementation of a unified standard combining these two standards as well as a certification system. More information: http://www.fairwild.org/documents/ | **SOCIAL AND FAIR TRADE REQUIREMENTS**<br>**Principle 5. Promoting Fair Contractual Relationships between Operators and Collectors.**<br>Collectors have the structures and access to information needed to represent their interests and participate in FairWild Premium decisions. There is no discrimination against particular groups as collectors.<br>5.1 Fair contractual relationships<br>5.2 No discrimination against collectors<br>**Principle 6. Limiting Participation of Children in Wild-Collection Activities.**<br>Collection and processing by collectors is done without substantial work contribution of children.<br>6.1 Children and young collectors<br>6.2 Collectors contracting children for collection work<br>6.3 Children helping their parents in collection<br>**Principle 7. Ensuring Benefits for Collectors and their Communities.**<br>Trade intermediaries are minimized, collectors are ensured a fair price for the collected goods, and community social development is supported through means of a FairWild Premium fund.<br>7.1 Fair pricing and payment of collectors<br>7.2 FairWild Premium use and administration<br>**Principle 8. Ensuring Fair Working Conditions for all Workers of Wild-Collection Operations.**<br>The collection operation ensures good working conditions for all workers of the wild-collection operation.<br>8.1 Basic labour rights for wild-collection operation staff<br>8.2 Safe work environment for wild-collection operation staff<br>8.3 Fair employment conditions for wild-collection operation staff<br>**MANAGEMENT AND BUSINESS REQUIREMENTS**<br>**Principle 9. Applying Responsible Management Practices**.<br>Wild collection of target species shall be based on adaptive, practical, participatory and transparent management practices.<br>9.1 Species / area management plan<br>9.2 Inventory, assessment and monitoring<br>9.3 Implementation of sustainable collection measures by collectors<br>9.4 Training and capacity building<br>9.5 Transparency and participation<br>**Principle 10. Applying Responsible Business Practices.**<br>Collection of wild resources shall be undertaken to support quality, financial and traceability requirements of the market without sacrificing sustainability of the resource.<br>10.1 Market / buyer specifications<br>10.2 Traceability<br>10.3 Financial viability and accountable trade relations |



| Standard | Scope | Principles and Criteria |
|---|---|---|
| The Union for Ethical Biotrade (UEBT) | The UEBT developed a verification framework for native natural ingredients. It is directed to private sector organizations looking to make a contribution to sustainable development and the objectives of the Convention on Biological Diversity through recognition of their policies on quality, sustainable sourcing, and corporate social responsibility. More information: http://www.ethicalbiotrade.org | **1.Conservation of biodiversity**<br>1.1 Characteristics of ecosystems in which sourcing activities take place shall be maintained or restored.<br>1.2 Sourcing activities shall conserve and restore biodiversity.<br>1.3 Sourcing activities shall be aligned with strategies, plans or programmes for conservation and sustainable use of biodiversity applicable to sourcing areas.<br>**2 Sustainable use of biodiversity**<br>2.1 The sourcing of the species shall be supported by management documents addressing, inter alia: harvest rates, monitoring systems, productivity indexes and regeneration rates.<br>2.2 Employees, suppliers and collectors involved in sourcing activities shall be trained in the implementation of good collection, cultivation and quality assurance practices.<br>2.3 Purchasing schedules shall be organised according to the supply of the sourced species or the harvesting seasons.<br>2.4 Appropriate mechanisms shall be implemented to prevent or mitigate negative environmental impact.<br>**3 Fair and equitable sharing of benefits derived from the use of biodiversity**<br>3.1 Negotiations related to the sourcing of biodiversity shall be transparent and based on dialogue and trust.<br>3.2 The organisation shall pay equitable prices for the natural ingredients that it sources.<br>3.3 The organisation shall contribute to local sustainable development goals in sourcing areas, as defined by producers and their local communities.<br>3.4 Traditional practices linked to the sourcing of species and ingredients shall be recognized.<br>3.5 The organisation shall comply with legislative or regulatory requirements on access to biodiversity and associated traditional knowledge for research and development and the sharing of resulting benefits.<br>3.6 For research and development activities, even if there are no legislative or regulatory requirements on access to biodiversity and associated traditional knowledge, such access shall be subject to prior informed consent and based on mutually agreed terms.<br>3.7 For research and development activities, even if there are no legislative or regulatory requirements on the sharing of benefits arising from the use of biodiversity and associated traditional knowledge, as well as subsequent application and commercialisation, benefits shall be shared in a fair and equitable way and based on mutually agreed terms.<br>3.8 Patents and other intellectual property rights shall be exploited and enforced in a manner that is supportive to the objectives of the CBD and the Ethical BioTrade standard.<br>**4 Socio-economic sustainability (productive, financial and market management)**<br>4.1 The organisation shall demonstrate sound financial management.<br>4.2 The organisation shall integrate the requirements of the Ethical BioTrade Standard into its management system for its operations and supply chains.<br>4.3 The organisation shall have a quality management system in place, in line with market requirements.<br>4.4 A traceability system shall be in place allowing identifying the origin of the natural ingredients.<br>**5 Compliance with national and international legislation**<br>5.1 The organisation shall respect international agreements related to biodiversity, particularly the CBD, the Nagoya Protocol and CITES.<br>5.2 The organisation shall respect national and local regulatory requirements related to the use and trade of natural ingredients.<br>5.3 The organisation shall pay legally required fees, taxes and other charges.<br>**6 Respect for the rights of actors involved in BioTrade activities**<br>6.1 The organisation shall respect human rights.<br>6.2 The organisation shall respect the rights of indigenous and local communities, as defined by UNDRIP, ILO 169 and national laws, in its sourcing activities.<br>6.3 The organisation shall provide adequate working conditions for its employees.<br>6.4 The organisation shall not threaten local food security.<br>**7 Clarity about land tenure, right of use and access to natural resources**<br>7.1 The organisation shall use land for its sourcing activities with respect of established rights. |

The analysis of best practices, projects and lessons learned case studies regarding the use of species has been an important starting point since the Convention on Biological Diversity (CBD) and CITES first recognized the value of conservation, sustainable use and the fair and equitable distribution of benefits. In this light, and for the purposes of this Handbook, a series of relevant case studies were reviewed, resulting in eight key factors for the consideration of Parties when establishing mitigation and sustainable use promotion measures.



# Key factors for the establishment of mitigation measures

**Factor 1:** Compensation of the costs associated with the inclusion of species in CITES

**Factor 2:** Equity, empowerment and ownership

**Factor 3:** Formation of associations representing harvesters from poor rural communities

**Factor 4:** Market mechanisms and access to microcredit

**Factor 5:** Consumer confidence

**Factor 6:** Social and environmental certifications

**Factor 7:** Intersectoral technical support

**Factor 8:** Favorable international context

## Factor 1: Compensation of the costs associated with the inclusion of species in CITES

The impacts of conservation programs associated with CITES-listed species may have a disproportionate effect on poor rural communities. The implementation of decisions to list species in Appendix I and, to some extent, in Appendices II and III, implies the imposition of restrictions on trade and may limit the income sources available to the poor, particularly in the short term. Consequently, these communities may be negatively affected unless mitigation measures or alternatives intended to protect their livelihoods are designed.

CITES implementation may also increase transaction costs (e.g. permits or authorizations). While intermediaries usually capture these costs, they have the potential of reaching actors throughout the value chain, including poor rural communities.

## Factor 2: Equity, empowerment and ownership

Many conservation programs seek to benefit poor rural communities, but experts suggest that the poorest of the poor do not derive equal benefits (see Jones, 2009; Honey, 1999). Inequities in terms of the ownership of resources, coupled with increased enforcement and compliance measures, a lack of education, and institutional weakness in terms of controlling illegal trade, affect the ability of the poor to stake their claim on the resources and increase their vulnerability to third parties (e.g.illegal extractors and wealthier people that can purchase or make use of the land) (FFI, 2008).

### Gender equality

Gender issues are explicitly addressed in most of the instruments proposed in this Handbook, but nevertheless deserve special attention. The European Commission (2008) highlights developing countries' lack of reliable and consistent data for the purposes of carrying out social analyses of trade in community products, particularly in areas such as gender differentiation. It is crucial for the execution of assessments and analyses of mitigation measures to distinguish between groups with different needs and livelihood strategies. Furthermore, the European Commission notes that within virtually all communities, differences according to gender, socioeconomic status, and geographic location exist (European Commission, 2008). In this light, whichever type of sustainability indicators is selected or designed to monitor mitigation measures should include gender indicators.

Marshall et.al. (2006) in their study of Mexico and Bolivia, emphasize that activities related to non-timber forest products (NTFPs) can give women a greater sense of self-confidence, potentially even improving their status within the household and community. The authors also stress that the successful commercialization of NTFPs can have a positive impact on the livelihoods of women, being one of the few activities that generates cash income for women in marginalized rural communities. What's more, the participation of both men and women in NTFP activities represent an economically viable activity in which an entire household may participate, as the work may be divided. Finally, given gender norms, women are more likely than men to participate in the processing and cultivation of NTFPs. In this sense, specifically helping women access technologies can increase women's yields in these activities and profit the whole household or community (Marshall et.al 2006).

To promote the commercialization of NTFPs so that it benefits women, we must work towards ensuring a sustainable supply of the resource, providing access to market information to women, and developing ways to overcome unequal barriers to power and market entry.

## Factor 3: Formation of associations representing harvesters from poor rural communities

The need for the poor to be represented through harvester and trader organizations was discussed during the 2006 CITES and Livelihoods Workshop (FFI, 2006), where it was agreed that representation mechanisms play an important role in ensuring that the distribution of benefits is equitable and does not work against the poorest sectors of society. An example of a successful implementation strategy of this concept is providing access to licensing to support such associations (e.g., for Hoodia in South Africa, as discussed in Annex I of this Handbook).

## Factor 4: Market mechanisms and access to microcredit

Unforeseen market forces have the ability to significantly impact actors throughout the value chain. It may turn out that the use of a CITES species is not profitable long term due to fluctuations in demand or market saturation, even when sustainability measures such as extraction quotas are put into practice.

The supply and demand for products derived from wildlife species may vary for reasons unrelated to CITES or conservation in general, for example, climate change or external market forces such as the introduction of replacement products. In other cases, price reductions may occur due to a specimen or product inundating the market. This particular phenomenon has been noted in the crocodile skin trade and sales of live white rhinos and Bighorn (Marco Polo) Sheep hunting trophies in Mexico (MacGregor, 2006; Reidl, 2006).

In addition, demand for wildlife specimens often falls when captive breeding proves to be more profitable, as captive-bred specimens have the advantage being tame, free of disease, and available in unusual color variations (Robinson, 2001). However, ex situ production of some species continues to be costly, so there are limited possibilities for sustainable wildlife production among those with limited resources (C. Ó Críodáin, personal communication). While microcredit represents a viable way for such communities to invest in ex situ production, access to microcredit may be restricted for the poorest populations. (Entwistle, 2002; Roe, 2002)

In order to address these situations, consideration could be given to broader development policies that support strengthening entrepreneurial capabilities, including providing access to microcredit for poorer communities. This may in fact go beyond the context of CITES implementation to include other methods for generating income unrelated to species use, such as agriculture, handicraft production, and other activities.

## Factor 5: Consumer confidence

The CITES vision statement begins with the words "Conserve biodiversity and contribute to its sustainable use…" (Strategic Vision, Conference Resolution 14.2). However, CITES is perceived as a convention that protects species against overuse, so it is considered to restrict rather than to promote trade. Although Appendix II listings are a positive way to promote sustainable trade, that is not how CITES is generally perceived from the outside, particularly among non-timber forest product, fishing, and timber producers (UICN, 2000). To instill consumer confidence, it is advisable to continuously highlight the Convention's non-detriment findings and enforcement and compliance measures



## Factor 6: Social and environmental certifications

When feasible, and when a certification standard for CITES species exists, certification should be sought. Even if the market does not require it for that particular species, environmental authorities may request certification to ensure sustainability. Consideration should be given to the fact that certification may be costly and thus become an obstacle to trade initiatives of the poor, unless there are organizations to assist them in obtaining certification (Bodmer, personal communication; Watson, 2005). Certification of the sustainable extraction of species could reverse current trends towards ex situ production, as in the case of crocodiles (Macgregor, 2006).

Certifications or compliance with rules and standards are thus an important and necessary mechanism. However, Parties must seek to support the poor so that they may benefit from them. To achieve this, existing certifications and standards should be included when planning the management of a country's timber and non -timber resources. If scientific authorities comply with accreditation standards as in the case of the International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants (ISSC-MAP), certification costs could be significantly reduced. Efforts are being made to achieve this through ISSC-MAP pilot projects in China, Cambodia, Nepal, India, Ukraine, Bosnia and Herzegovina, Brazil, and Lesotho.

The ISSC-MAP includes all of the standards required of a government, industry, and others (including poorer communities) for adopting and managing a resource sustainably while taking into account access, the sharing of benefits, value added, and FairWild certification processes.

The ISSC-MAP standard can be adopted within or outside the CITES species framework, because its purpose is to strengthen domestic management rather than placing management in the hands of CITES or the certifier. However, adoption of the ISSC-MAP does not preclude CITES listings. This approach encourages national authorities to consider the social criteria of livelihoods and biological resources simultaneously, as required by the Convention on Biological Diversity. Naturally, the ability to implement such a system is limited by a government's resources, but over the long term it may bring about significant gains (D. Newton, personal communication).

It is important to note that a large number of CITES species have no specific guidelines for certification of sustainable use, but using a general certification framework can help reorient Parties towards sustainable use without necessarily resulting in certification.

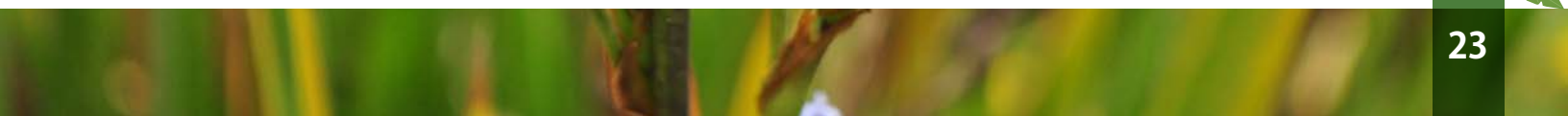
## Factor 7: Intersectoral Technical Support

Livelihood issues relating to the implementation of species listings in CITES Appendices can only be addressed successfully if they are part of broader poverty reduction strategies (C. Ó Críodáin, personal communication). When these strategies operate in isolation, their impact may be minimal.

It is therefore important for CITES authorities to establish intersectoral links with government agencies involved in issues of land and property rights, agriculture, conservation, rural development, trade, and industry. Technical assistance and partnerships willl help CITES Parties to establish solid non-detriment findings; improve enforcement and compliance with the Convention's standards; employ market mechanisms when feasible; and ensure appropriate benefit-sharing mechanisms, with the objective of mitigating negative impacts.

## Factor 8: Favorable international context

The implementation of CITES listings implies stricter domestic measures pertaining to certain species and restricted market access for products originating from these species, subsequently affecting the income that can be earned from the sale of these species/products. Concerns of this nature have been voiced in relation to crocodile and sport-hunting product exports to the USA, of wild bird exports to the USA and Europe, of reptiles to Europe, and of a variety of species to Australia (Kievert, 2000; Cooney & Jepson, 2005). Stricter domestic measures may also have an impact on export opportunities as in the case of the Appendix II listing of seahorses in the Philippines (Christie, forthcoming). Finally, the recommendations of the CITES Significant Trade Review may also affect trade opportunities (Roe, 2002). It is thus recommended that Parties take part in international trade law discussions in order to address the potential impacts of such legislation on poor rural communities.



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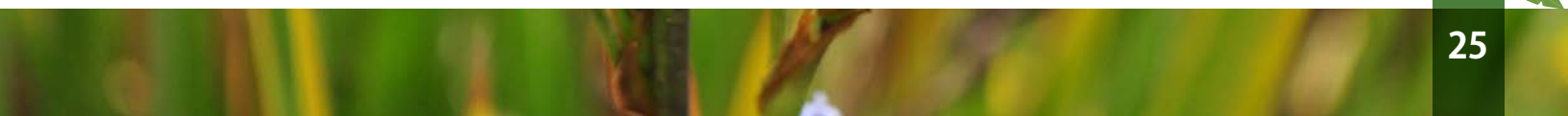

# Annex I. Case studies

## I. Ecotourism

### A. Sea turtles (Appendix I)

Marine Turtle populations have been severely affected by harvest, by-catch, shipping and destruction of nest beaches. However, marine turtles are viewed as a "flagship species" and are reportedly a valued component of ecotourism projects that are being developed to contribute to local livelihoods. The potential for revenue generation from marine turtles for tourism purposes is reportedly greater than that from turtle products, and has the added benefit of being a more sustainable source of income long term. However, benefits derived from such projects depend on the level of investment and the stability of the tourism market. Also, benefits to the poor generally materialize in the form of employment, which in turn may require the poor to have prior education and training.

In the Caribbean, as in other parts of the world, marine turtles are harvested both legally and illegally, particularly for domestic use of their eggs and flesh. Often there is little government enforcement of regulations and government is increasingly entering into co-management agreements with communities whereby the community receives benefits in exchange for the sustainable use of the resource, whether consumptive or non-consumptive. Such projects are frequently supported by NGOs who lend training, research and management assistance.

In Cuba, marine turtles were formerly harvested for food as per local livelihood needs, and their shells were stockpiled. Following the defeat of proposals to move the Cuban population of marine turtles to a CITES Appendix enjoying less stringent conservation rules so that the shells could be sold on the international market to raise extra revenue, there is currently no market for these shells (though CITES amendment proposals were submitted at CoP 10, 11, 12). These proposals proved controversial, partly due to the regional range of turtle populations.

TORTUGA MARINA
PICTURE: FREDY A. OCHOA

G. Webb (pers. comm.) notes that "Clearly, had Cuba's proposal been supported by the IUCN MTSG (Marine Turtle Specialist Group), and the legal trade allowed, CITES would have been in a prime position to maintain the incentives to increase legal trade and counter illegal trade. No such incentives exist today."

### *Key factors leading to success or failure*

- Flagship species;
- Consumptive use less profitable than value to ecotourism;
- Stability of tourism market.

### *Future issues*

- Need to reduce by-catch and other sources of mortality and implement existing legislation
- Where tourism is not possible, need to find means to support disadvantaged poor.

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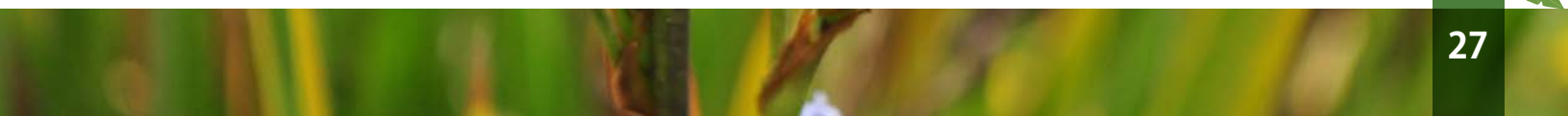

# II. Hunting

## B. Trophy Hunting & Live Sales of White & Black Rhinos (Appendix I)

Southern white rhinos have recovered from a single population of between 20 and 50 animals in 1895 to about 17,500 today, with an additional 750 animals in captive breeding institutions worldwide. Listed in Appendix I in 1975, the South African population was moved to Appendix II in 1995 for the purposes of live sales and hunting trophies, followed in 2005 by the Swaziland population. South Africa has a policy of encouraging landholders to benefit from the sale of hunting trophies and live animals as well as from tourism. This policy, coupled with strict management and the species' grassland habitat and social grouping structure have contributed to its dramatic population increase. Removals of animals have maintained populations below carrying capacity to ensure maximal rates of reproduction. Some contributions to the livelihoods of the poor will have been generated through a range of employment opportunities as guards, in hunting and capture operations, and in the tourism industry. Measures that allow landholders to derive economic incentives from the sustainable hunting and live sale of rhinos are connected with the maintenance of areas of "bush" habitat.

Black rhinos, *Diceros bicornis*, were included in Appendix I in 1977. In contrast to the white rhino, black rhinos were decimated more recently in the 1980s when a wave of poaching spread through Africa, but was halted at the borders of Zimbabwe, Namibia and South Africa. More recently, black rhino populations of South Africa and Namibia were annotated with a quota for hunting trophies in 2004. Rhino poaching in Africa and Asia continues to be problematic.

## C. Trophy hunting – Markhor (Appendix I)

Markhor were included in Appendix I in 1975, while Urial were included in Appendix II. Populations of both species inhabit the vast mountainous and forested regions across Central and Southern Asia. Both species declined due to poaching in the 1980s, leading to the establishment of a conservation programme with assistance from USFWS. Following negotiation, local tribesmen agreed to stop local hunting in exchange for potential employment and hunting opportunities and it wasn't until 1986 that the markhor and urial hunting resumed. Finally, in 1997 a CITES trophy hunting quota, which was subsequently doubled in 2002, was agreed upon. The Programme has continued to employ local tribesmen and provide support through extension work with the objective of improving infrastructure and agriculture, while the wildlife population continues to grow.

### *Key factors leading to success or failure Multispecies hunts;*

- Multispecies hunts;
- Conservation Champions;
- High value, Low off-take, allowing population recovery;
- Community buy-in and agreement;
- Community benefits through: employment, infrastructure projects and agricultural outreach.

### *Issues for the future*

This successful markhor project appears to provide a model for other communities to emulate. However, results from a Mexico case study suggest that increasing the supply of trophies may reduce prices and impact the projects (see Reidl, 2006).

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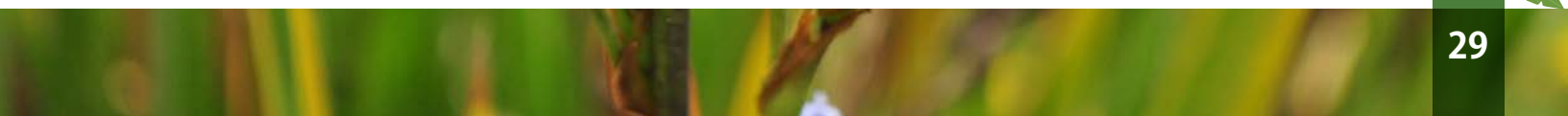

# III. Trade in live animals and plants

## D. Seahorses (Appendix II)

### *Stricter domestic measures*

Dried seahorses feature as an important ingredient in some traditional medicines, and live ones have been increasingly in demand in the aquarium trade. During the 1980s and 1990s, trade in seahorses spanned the globe, moving from one population to another, suggesting that as populations were depleted, the trade relocated to new areas. This led to the Appendix II listing of seahorses, which came into effect in 2004, in order to regulate trade and ensure sustainability. The entry into force of the listing was delayed 18 months to allow Parties to establish necessary procedures and minimum size limits to assist in the development of non-detriment findings.

Seahorses are collected and sold by artisanal fishers. In some areas, "Project Seahorse" has been working with these groups to develop alternative livelihoods and to encourage fishers to establish protected areas, thus allowing stock to increase. These approaches have been met with some success, but the Appendix II listing is thought to have reduced livelihood opportunities in the Philippines, where the export of Appendix II listed species is banned.

The Appendix II listing of seahorses has also resulted in the captive breeding of non-native species for export in Sri-Lanka. Given that the export of captive-bred specimens is deemed simpler than carrying out non-detriment findings for native species, local fishermen are often excluded from the trade, thus removing requirements for the monitoring of local seahorse populations. A recent case study involving a European species suggests that increasing the minimum size of fish captured could increase population viability and lead to longer-term increases in income. This is provided that fishers could be supported in the short short-term while changing their fishing habits and allowing populations to recover.

### *Key factors leading to success or failure:*

- Stricter Domestic measures;
- Burden of non-detriment findings;
- Delay of listing entry into force, supposedly allowing Parties to make provisions for implementation;

### *Future issues*

- Will captive breeding undercut the live-trade market?
- How to support fishers in their dealings with traders who now face permit costs?

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## E. *Amazona aestiva (Appendix II)*

### *Stricter domestic measures*

The Blue-fronted parrot, *Amazona aestival*, was an important flagship species included in an innovative programme run by the Argentine government that aimed to contribute to local livelihoods. The regulated trade of blue-fronted parrots from the Chaco region was designed to replace a high volume, poorly regulated trade that yielded only minor revenues to local people. As a result of the project, the regulated trade was significantly lower than the pre-regulated levels. Moreover, revenue from the programme reportedly financed the development of three strictly protected habitat areas, and provided almost 20% of the peasant landowners' annual family income, countering pressures for agricultural intensification and conversion to soybeans. However, stricter domestic measures in the US and the European ban on imports of wild birds designed to protect Europe against the introduction of bird flu have impacted the programme, eliminating conservation incentives and livelihood contributions from the project.

### *Key factors leading to success or failure*

- Investment by the government;
- Dialogue and support of stakeholders;
- International market opportunities for the trade of the species.

### *Future issues*

- Availability of other markets;
- Illegal trade.

### *References*

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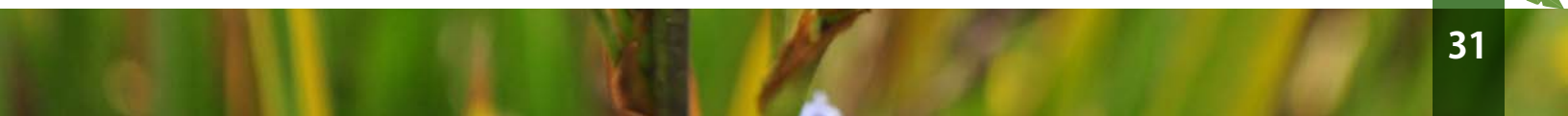

## F. Propagation of *Galanthus bulbs* (Ap. II)

In the mid 1980s the trade in *Galanthus spp.* bulbs originating from Turkey was thought to be unsustainable. A project was therefore implemented with the objective of working with villagers to develop cultivation of the bulbs as a means of contributing to local livelihoods and reducing the impact of wild harvest on the species. Villagers collected bulbs out of necessity rather than preference, both in an organized and ad hoc manner. Villagers received less than 1% of the final sale price, and five main traders exported the bulbs to the Netherlands for re-sorting and export to the UK, US and Germany.

The project organized the donation of seed bulbs, which are too small to export, by the exporters to villagers. Villagers planted these bulbs in several areas around the village and after three years, the bulbs were harvested and the small daughter bulbs replanted for subsequent harvest in three years time. The exporters paid a premium for artificially produced bulbs and eventually villagers were bringing in 12% of the final market price.

Three villages of over 250 people were ultimately involved in the project. The project used existing trade structures, complied with national legislation and regulations, undertook the monitoring of overseas suppliers, and carried out customer awareness campaigns about conservation issues and sustainably harvested goods. The project's purpose was ultimately multifaceted: it aimed to provide rural development support, local horticultural training, and address international legislation, fair-trade, and environmental consumer issues.

### *Key factors leading to success or failure*

- An integrated approach to local development issues;
- Support from international donors & national government;
- Effort to increase customer awareness and premium prices;
- Existing trade structures used;
- Project improved husbandry techniques;
- Increasing value;
- Trade restricted to relatively few traders.

### *Future issues*

- Could certification help to generate revenue for the local community?

### *References*

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## G.Orchids, cacti, & succulents (Appendix I)

Artificial reproduction is recognized as a means of reducing wild harvest while allowing trade in specimens of species listed in Appendix I (Res Conf 9.19 Rev CoP13 on Guidelines for Nursery Registration). This mechanism would consequently allow species listed in Appendix I to contribute to livelihoods. However, while there are now 108 nurseries registered to export Appendix I listed specimens, these are in only 11 countries. Of these 108 nurseries, 10 are from European countries, 91 from India and the remaining seven from Chile, Colombia, The Democratic Republic of Congo, and Malaysia and Myanmar, all countries with rich biodiversity. Given that so few nurseries are registered to export Appendix I specimens, the vast majority of opportunities for CITES to contribute to livelihoods exist through the trade of Appendix II listed species.

More work may be needed to register nurseries in the range of countries that can contribute to livelihood generation in local communities.

TRIGRILLO EN ECOPARQUE MOCOA, PUTUMAYO
PICTURE: FREDY A. OCHOA

# IV. Medicinal and Aromatic Products

## H. *Prunus africana* (Ap. II)

*Prunus africana* bark is used internationally in the production of medicines that treat prostate problems, and is used locally for both medicine and timber products. The species was listed in Appendix II in 1994, and has been the subject of significant trade reviews and recommendations by the Plants Committee. By 2009, five Parties had issued quotas (four of which were zero quotas).

According to trade reviews, the species was listed in Appendix II in 1994 after a period of extensive debarking and felling of whole trees. However, despite significant efforts by government, business and local communities in Cameroon, the main source of *prunus Africana* bark trade from mainland Africa, problems remain in many areas such as tenure arrangements, enforcement, sanction mechanisms, corruption, accountability, incentive structures and sustainable use. The greatest benefit derived from management efforts has been the creation of a broad awareness of the need for sustainable use of forest resources (Abensperg-Traun, 2009).

One study in Cameroon found that the commercialization of Prunus sp. collection has contributed to community and individual livelihoods through community infrastructure projects (Ndam & Marcelin, 2004). The study further observed that wild bark collection from state forests, which is seasonal and employs many migrant workers, is gradually being complemented by domestication with the aim of increasing supply. It was also noted that the local harvesters receive a small percentage of the final price, and while they are organized in harvesters associations, require further support in this regard. The study concluded that additional efforts are needed in order to address regulation, recognizing customary rights, the sharing of benefits, technology and the development of a scientific basis for non-detriment findings.

TRAFFIC South Africa, together with the CITES Secretariat, facilitated a *Prunus africana* workshop to guide the governments of the main producer states in the direction of a management plan for the species. The issue of livelihoods was not fully addressed due to time constraints, although the topic was raised numerous times. Ideally some sort of simple management plan, accompanied by practical facilitation, is needed, but this is only likely to be effective if the Parties work in a collaborative manner (D.Newton, pers. comm.).

### *Key factors leading to success or failure*

- The combination of a high value product and absence of a simple management system to regulate the trade has led to unsustainable harvest;
- More sustainable collection methods;
- Donor support;
- Seasonal harvests do not clash with agricultural year;
- Harvester organisations are needed to control trade.

### *Future issues*

- Recognition of customary rights and benefit sharing.
- Development of a simple management system.

### *References*

Abensperg-Traun, M . 2009. CITES, Sustainable Use of wild species and incentive-driven conservation in developing countries, with an emphasis on southern Africa. *Biological Conservation*, 142, 948-963.

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## I. Medicinal – *Hoodia spp.* (Appendix II)

*Hoodia spp* grow in southern Africa. Certain species, such as H. *gordonii*, produce a complex of substances that have appetite suppressant properties. They are also used as ornamental plants.

Trade in the genus reached a peak during the 2003 to 2007 period, causing widespread damage to wild populations of H. *gordonii* and to a lesser extent other *Hoodia* species. Consequently, in 2004 the genus *Hoodia* was listed in Appendix II with an annotation that indicated that CITES permits would not be needed for products originating from controlled harvesting and production operations collaborating with the CITES authorities in Botswana, Namibia, and South Africa (Anon 2008a.). This essentially means that trade not managed by the abovementioned state authorities is subject to CITES controls. According to proponents of the annotation, the intent was to encourage pharmaceutical companies to deal directly with countries to provide added value in the countries of origin. However, while recognizing the importance of supporting livelihoods, Switzerland placed a reservation noting that the annotation goes beyond the remit of CITES, regulating in effect only material from artificially propagated sources, or sources not working with the range state authorities (Swiss CITES MA, 2005). None of the range states have thus far entered into commercial agreements with companies, effectively meaning that trade in the entire *Hoodia* genus is controlled under Appendix II with no exceptions.

By 2009, the wild harvest industry had virtually shut down due to a glut of artificially propagated material and a decision by Unilever to pull out of an industry which benefited relatively few people - mostly farmers and business people in the medicinal plants industry in Namibia and South Africa. The only poor people to benefit were farm workers (both local and originating from cities), and this was curtailed by the plant's seasonal growth and the cancellation of permits to harvest wild plants. The only exception to this was the agreement signed with the South African Council (SAN) that allocated farm workers (through a trust fund) a portion of profits from the business based on their intellectual knowledge related to the use of the plant as an appetite suppressant (see Rachel Wynberg 2008 and 2009). Now that the industry has gone into decline due to Unilever pulling out, the value of this agreement is questionable. There is still a demand for *Hoodia*, but mainly for alternative medicine purposes, and it is unclear how much poor rural communities will benefit.

### *Key factors leading to success or failure*

Unilever's decision to cease trade in Hoodia has lead to a dramatic decline in the industry and its future remains uncertain. The continuation of the industry will depend on how much value is attributed to the inherent medicinal value of the plant and to some extent its ongoing use as an alternative medicine, and whether any other large industry players enter the space left by Unilever. The decline of the formal medicine market represented by Unilever leaves the future of the industry largely in the hands of the alternative medicine market, which does not add much value to the product in South Africa or Namibia as it is mainly dried plant material that is exported and value is added in the importing country. Income from this is likely to be minimal and income streams to poor communities and the SAN Council will also decline. As the annotation for this species is based on commercial agreements, its future without substantial corporate interest seems somewhat uncertain; and this similarly seems to limit livelihood options (D. Newton, pers. comm.).

### *References*

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Swiss CITES MA. 2005. Anon. Annotation #9 and the guiding principles for annotations relating to medicinal plants PC15 Inf 8.

## J. Aromatics – Agarwood (Appendix II)

Agarwood is an aromatic material used in the production of incense. It comes from fungal infections on trees from the *Aquilaria* and *Gyrinops* genera. In 1995, *Aquilaria* malaccensis was listed in CITES Appendix II, and in 2005, the remaining *Aquilaria* and *Gyrinops* species followed suit. Agarwood harvesting is mostly carried out by organised groups, but some opportunistic harvesting may also exist. The majority of the harvest is likely to be destined for international trade. Studies in Lao PDR suggest that harvesters obtain a comparatively high proportion (20%) of the final sale price compared to other NTFPs at the national level, making it a significant contribution to livelihoods. However, the resource seems to be declining in all range states and more time is required on harvesting trips to gain comparable returns, even though prices are increasing in line with the scarcity of the resource.

Since the CITES listing, plantations have been developed in some countries, ranging from small-scale home gardens to larger commercial enterprises. These plantations have increased in number due to levels of scarce supply, particularly for higher quality grades of agarwood.

### *Key factors leading to success or failure*

- High Value;
- Lack of enforcement;
- High proportion of final price captured by harvesters;
- Donor and Business investment in plantation.

### *Future Issues*

- Sustainability;
- Tenure and governance.

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# V. Timber Products

## K. Mahogany (Appendix II)

In the Maya Forest of Mexico land is managed communally, by ejidos. These plots of land are used for timber production as well as farming. Mahogany is the most valuable product, commanding higher prices that the softwood and other hardwoods produced in the region. The ejidos recently developed management plans and operate on a 25-year cutting cycle. In addition, experiments on mahogany regeneration have shown that collecting seeds, producing seedlings and replanting in large areas of disturbance is beginning to show positive results. These locally managed forests are contributing to local livelihoods.

### *Reference*

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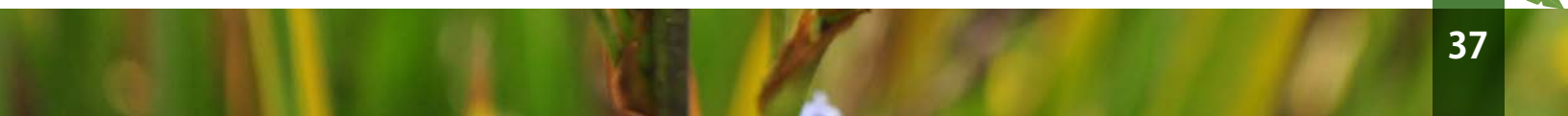

# VI. Fiber and Skin Products

## L. Vicuña fiber (Appendices I and II)

As a native species, the vicuña is perfectly adapted to the harsh climatic conditions of the high Andean mountains, making it an ideal renewable animal resource. The species also plays a very important role in the ecosystem (I. Sanchez, pers.comm.).

Vicuña populations were included in Appendix I in 1975 as numbers had been driven to low levels by competition with livestock and poaching. Following its listing in Appendix I, the species has shown a dramatic population recovery, resulting in occasional conflicts with local people due to grazing competition. During the late 1980s and 1990s, many populations were moved to Appendix II, latterly for the purposes of live shearing and allowing trade in wool and wool-derived products, provided that such products are marked with the country of origin (all other products remain in Appendix I). Shearing is reportedly also successful in delivering benefits from wool sales to local people.

The management of vicuña related activities differs between range states depending on their socio-economic status and policies. In Bolivia and Peru, traditional Inca Chakus, or round-ups, are employed. Conversely, in Argentina, where land is generally under private ownership, the vicuña are maintained on ranches, while in Chile there is a mixture, with Chakus on communal lands and ranches on private lands. There are concerns however that the development of these fenced areas in some countries could lead to population fragmentation and genetic erosion. In Peru, the live capture and shearing has been shown not to adversely affect population status. Issues have also arisen surrounding the distribution of benefits, role of privatization, and problems associated with marketing boards. Modelling studies have recently warned that if community based conservation is not implemented carefully, its impact may be perverse.

National censuses carried out by various bodies (PEURV, INRENA and CONACS) showed that vicuña populations increased in Peru from a few thousand individuals in the 1960s to around 120,000 by 2000. In 1994, local communities were permitted by law to use vicuñas sustainably. Ensuring the conservation of the species, however, remains the responsibility of The Government (I. Sanchez, pers. comm.).

Law No. 26496 officially recognised over 600 local community organisations as entitled to sustainably use the species. This successful experience in which local communities manage the trade has placed Peru as a leader in the recovery and sustainable use of threatened species. It has also had a positive impact on the cohesion of local communities, as the whole community, including men, women and children, is involved in vicuña related activities (I. Sanchez, pers. comm.).

Despite the social and economic importance of vicuñas to poor rural communities in Peru, lack of infrastructure, including access roads serving areas where shearing takes place, is a common problem faced by fibre producing organizations, limiting their ability to profit from the trade. In 2008 the national market price per kilo of untreated wool was between US $350 and US $380. Combed fibre can reach US $650 per kilo. Local women are responsible for combing the wool, receiving US $70-140 per kilo. Export prices per kilo, on the other hand, are much higher, ranging from US $400 for untreated wool, to US $1,575 for combed wool (I. Sanchez, pers. comm.).

More than 5,680 communities (>2 million people, or 40% of the total rural population) control 39.8% of agricultural land in Peru, consisting of mostly natural pasture in the high Andes. The majority of these people live in conditions of extreme poverty. Therefore, in order to ensure sustainable development, these communities need to be officially recognised and permitted to benefit as much as possible from the trade in vicuña wool (I. Sanchez, pers. comm.).

Lichtenstein (2009) notes that despite the high international commercial value and worldwide demand for vicuña products, benefits for local communities remain elusive: intermediaries capture much of the value of the production chain. In addition, the vicuña fibre market is comprised of only a handful of large buyers and a large number of sellers (an oligopsony), which places control of the trade and most of the profits with the buyers. Lichtenstein maintains that a key element in tackling poverty alleviation in this case is to secure exclusive usufruct rights to vicuñas for Andean communities.



### *Key factors leading to success or failure*

- Ban in trade contributed to long-term population recovery;
- Split-listings allowed some experimentation with novel approaches to develop sustainable collection methods;
- High value product;
- Donor investment in projects to develop the new approach.

### *Future issues*

- Need for marketing of sustainable products amongst consumers;
- Need for in-situ production, and review of captive husbandry;
- Equitable sharing of benefits with the poor;
- The vicuña provides a particularly relevant case study for future consideration of livelihoods impact.

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## M. Farmed Crocodilian skins (Appendices I and II)

Following large population reductions in a number of crocodilian species populations (although the statuses of some species were contested), many species were included in Appendix I in the early days of the Convention, thus banning their commercial trade. However, a number of trading states who were non-Parties continued to trade the species, and some Parties formulated reservations for particular species, permitting them to continue trading. Application of the Appendix I listing was in effect patchy, allowing some trade to continue. In addition, the Convention allows specimens of Appendix I species bred in captivity to be traded as Appendix II specimens, thus encouraging a switch from wild caught to captive-bred specimens. As the definition of "bred in captivity" was narrowed, a procedure for transferring crocodilians from Appendix I to Appendix II for farming purposes was introduced, eventually resulting in the split listing of several taxa. Ranching of crocodilians increased during the 1980s and 1990s, but communities are increasingly turning to farming or captive breeding.

As crocodile farming and captive breeding have increased, producers have faced some difficulties in marketing their products, particularly in the face of public perceptions that crocodilians are endangered, and prices are declining in some instances. Meanwhile, in terms of the livelihoods of the poor, there is widespread concern that barriers to entry (mostly in terms of investment) are simply too high for programs to benefit local people, except through seasonal egg harvesting and the provision of occasional employment opportunities. Interestingly, a recent study in Cambodia has shown how crocodile farming has increased the demand for water snakes as a food source for the crocodilians, and snake harvesting now contributes to smoothing out the seasonal vulnerability of the poor. However, the impacts on water snake populations could prove to be a topic of concern in the future. If crocodilian production is to continue to contribute to conservation and to livelihoods of the poor, the marketing of sustainably produced crocodilian products to consumers coupled with ameliorated sharing of benefits with the poor will be required.

### *Key factors leading to success or failure*

- Ban in trade contributed to population recovery;
- Reservations to Appendix I listing allowed some trade;
- Ranching provisions;
- Split listings;
- Individual/ commercial investment in crocodile facilities;

### *Future issues*

- Need for marketing of sustainable products to consumers;
- Need for in-situ production, linking production with the poor;
- More equitable sharing of benefits with the poor.

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## N. Peccary skins (Appendix II with zero quotas)

Peccaries, listed in Appendix II, produce a high-grade leather for which there is international demand. Following significant trade reviews in the 1990s coupled with concern over the high level of export of peccary skins, trade was banned in many range states. Thus, those involved in the trade of peccaries lost much of their revenue. Subsistence hunting, which represented the main benefit for the poor, continued despite the lack of value for the skins. In Peru, projects that develop added value for the skins have been implemented in exchange for the implementation of sustainable forest management with the assistance of donors and NGOs. The communities involved are working to develop management plans geared towards regulating the hunting of forest animals and the harvest of plant products in order to reach sustainable levels. Once sustainable harvests are in place and verifiable, then pelts can be certified as originating from forests that are managed for sustainable use. Given that Peccary pelts provide a high-end leather product, it is anticipated that a certification programme would increase benefits to local communities. However, the development of such programmes requires the investment of substantial financial and human capital over what could be a long period of time.

### *Key factors leading to success or failure*

- Population recovery; reduced consumption; investment in experimental projects;
- High value skins;
- Local communities obtaining rights to use natural resources;

### *Future issues*

- Individual returns on skins uncertain;
- Management of hunting for sustainability should allow continued hunting, but at lower levels than in the past.

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